# Trns•port SiteManager®
# and LIMS Training Guide for KYTC

**Student Edition**

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Prepared by



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# Table of Contents

# 1. Getting Started in LIMS

In this chapter, you will receive instruction about the following:

## Accessing Support Resources

The following SiteManager and LIMS documentation and support resources are available to KYTC staff.

### KYTC Help Desk

Contact the KYTC Help Desk at the following number:

- (502)564-4780

### KYTC Division of Materials Web Site

Access the KYTC Division of Materials web site at the following URL:

- http://transportation.ky.gov/materials

View and download the following from the web site:

- Training manuals

- LIMS policy and procedures

## Using this Guide

This guide consists of chapters. Each chapter consists of the following sections:

- Objectives

- Topics

- Instructor-Led Exercises

- Review

- Summary

## Objectives

Each chapter begins with the objectives both you and the instructor should try to achieve.

## Topics

Each chapter contains topics corresponding to these objectives. Each topic contains a short description and figure of the Trns•port SiteManager® and LIMS function being addressed. To further elaborate on the functions, we include a table of field definitions after each figure.

**Usage:** The field definitions include KYTC policy and procedures.

## Instructor-Led Exercises

Identify instructor-led exercises by the bulldozer icon and sequential numbering. Each instructor-led exercise is very explicit and details the specific steps to follow and the data to use.



**Exercise 5-2**

Figure 1-1. The Bulldozer Icon and Sequential Numbering
Used to Identify Instructor-Led Exercises

## Review

Each chapter ends with a review. The review summarizes the main points learned and all of the SiteManager and LIMS functionality covered in the chapter. Each review is as an excellent reference for the summary exercise that follows. Remember to use the reviews when you return to your office and begin using SiteManager and LIMS on your own.

## Summary

Summary exercises provide a means to practice the skills you acquired in the chapters. Read them carefully; the summary exercises are more general than instructor-led exercises, but they still provide steps to follow and data to use. As you perform the summary exercise, refer to the review steps for tips on navigation.

# Understanding the General Workflow

The following diagram shows the general workflow between SiteManager software's Materials Management and LIMS components.
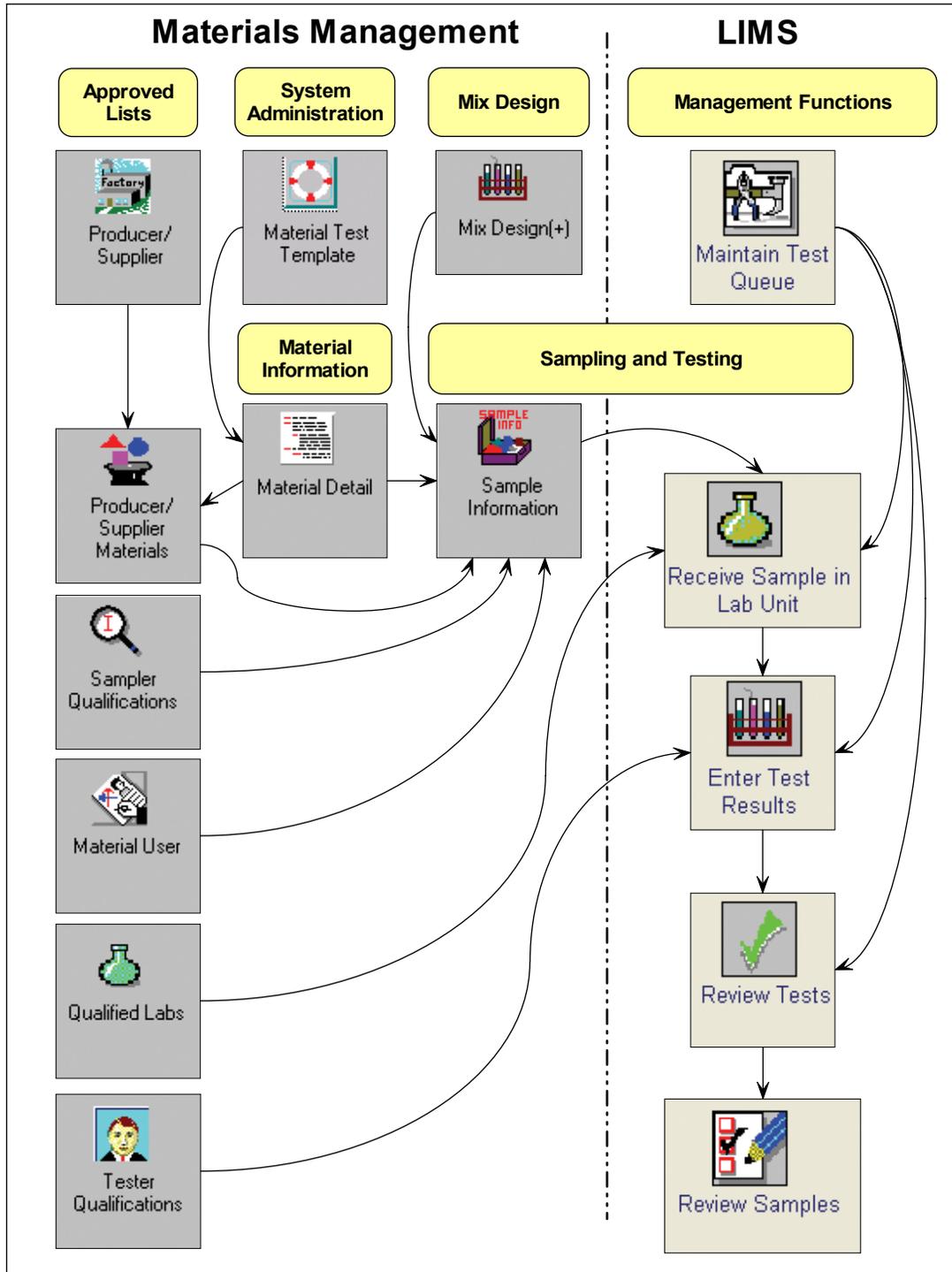


Figure 1-2.  General Workflow

## Trns•port SiteManager

SiteManager is a comprehensive construction management software product that covers the complete construction and materials management process from contract award through contract finalization in one enterprise-wide software package.

## SiteManager LIMS Component

The Lab Information Management System, referred to as LIMS, integrates seamlessly with SiteManager. LIMS streamlines the sampling and testing workflow from recording a sample to reviewing and authorizing samples.

When a sample arrives, enter the information into SiteManager's Maintain Sample Information window to capture the sample details and assign default tests.

After you assign tests, the sample arrives in the Receive Sample in Lab Unit queue. Once you receive the sample in LIMS, the Enter Tests Results queue displays the tests based upon qualifications and assigned lab units.

Completed tests from the Enter Test Results queue appear in the Review Tests queue. Review results, mark tests as complete, requeue tests, or order retests. After you complete the review of all assigned tests on a sample, review and authorize the sample in the Review Samples queue. If needed, send test results back to the lab.

At any time in the process, monitor the test assignments and easily add or cancel tests in the Maintain Test Queue window. Access all available information about all samples with View-Only Sample Information window.

# Starting SiteManager LIMS

You can access LIMS directly from SiteManager. With the Maintain Sample Information window open, click the LIMS button on the SiteManager toolbar. You do not have to log into LIMS when entering the application this way.

Alternatively, to access LIMS without starting SiteManager, double-click the LIMS desktop icon. When accessing LIMS from the desktop, the AASHTO SiteManager LIMS Login window appears. SiteManager and LIMS use the same user ID and password.

**Note:** If prompted to change your password, do so in SiteManager.



Figure 1-3.  AASHTO SiteManager LIMS Login Window

 **Exercise 1-1**

In this exercise, learn how to launch LIMS from SiteManager.

User ID:  **alincoln**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys:  **NA**

1. Start and log on to SiteManager as user **alincoln**. SiteManager displays the SiteManager Panel window.

2. Double-click the **Materials Management** icon. SiteManager displays the **Materials Management** panel.

3. Double-click the **Sampling and Testing** icon. SiteManager displays the **Sampling and Testing** panel.

4. Double-click the **Sample Information** icon. SiteManager displays the Maintain Sample Information window.

5. On the toolbar, click the **Open LIMS** button. SiteManager displays the AASHTO SiteManager LIMS application window.

*You've launched LIMS from SiteManager.*

# Understanding the Main Functions of LIMS

The Navigation Panel contains icons that correspond to the main functional areas of LIMS. A user's security group determines the available icons on the Navigation Panel.

For example, a lab technician would have the Receive Sample in Lab Unit, and Enter Test Results icons appear on the Navigation Panel. A lab manager would have access to different icons that reflect their group roles and responsibilities.



Figure 1-4.  SiteManager LIMS - Navigation Panel - All Available Icons Displayed

The following table includes information about each of the main functional areas of LIMS.

| LIMS Window | Function |
|---|---|
| View-Only Sample Information | Use to access inquiry-only information about samples in addition to a history of the samples received, tests assigned and test statuses. |
| Receive Sample in Lab Unit | Use to receive samples in the lab unit where the testing will be performed. |
| Enter Test Results | Use to record test data. |
| Review Tests | Use to approve tests or request a re-queue or retest. |
| Review Samples | Use to finalize samples or to send samples back to the lab unit for a review of tests. |
| Maintain Test Queue | Use to add tests, cancel tests, or change other information about the test queue. |

Table 1-1.  LIMS Windows and Their Functions

# Understanding the LIMS Toolbar

Many of the functions available from the menus are also conveniently available from the LIMS toolbar.



Figure 1-5. SiteManager LIMS - Toolbar - Common Buttons Displayed

 **Exercise 1-2**

In this exercise, learn how to identify the buttons on the toolbar.

User ID: **alincoln**      Password: **kentucky**      Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys: **NA**

1. On the Navigation Panel window, double-click the **Enter Test Results** icon. SiteManager LIMS displays the Enter Test Results window.

2. Place your cursor over a button on the toolbar. LIMS displays the name of the button.

3. Move your cursor to another button.

4. Repeat Steps 1 and 2 until you have reviewed all of the buttons on the toolbar. Note that most of these buttons are identical to those on the SiteManager Toolbar.

*You've identified the buttons on the SiteManager LIMS toolbar.*

## Opening Multiple LIMS Windows

In many instances, you will be working in a SiteManager LIMS window and may need to open another window without closing the current one. Having opened more than one window of LIMS, you can then control how the windows display.

**Exercise 1-3**

In this exercise, you will learn how to open a second window without closing the first window.

User ID:  **alincoln**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys:  **NA**

1.  On the toolbar, click the **SiteManager LIMS Panel** button. SiteManager LIMS displays the Navigation Panel window.

2.  Double-click the **Maintain Test Queue** icon. SiteManager LIMS displays the Maintain Test Queue window.

*You've opened a second window.*

## Controlling the Display of Multiple Windows

Having opened more than one LIMS window, you may now use a variety of standard Microsoft® Windows® operating system methods to control the display of the SiteManager windows and your movement between them.
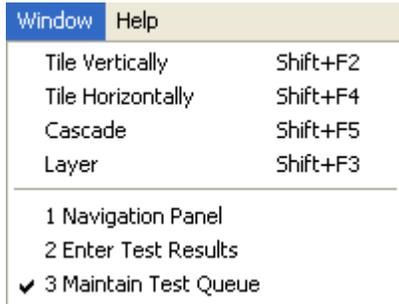


Figure 1-6. Window Menu - Multiple LIMS Windows Active

### Using Tile

To divide the screen into the number of open LIMS windows to compare the entries in each, use the Tile Vertically or Tile Horizontally features.

**Note:** Info Tech does not recommend tiling when more than two LIMS windows are active since you will not be able to see enough of each window to make it worthwhile. With three windows active, tiling will give each window only one third of the screen.

### Using Layer

To display the active LIMS window in a full screen display, use the Layer feature. Typically, you will use Layer to give each active window a full display or to return a single active window to full display after closing other windows.

# Closing Versus Exiting

LIMS follows the same principles of closing a window versus exiting the application as other applications on a Microsoft® Windows® operating system. When you are in a LIMS window and you wish to end your work in it, but still continue to work in LIMS, you should close the window. As with other applications, you only exit when you complete your work and want to log off of the application.

## Closing

Close a window in the following three ways:

- Click the Close button on the toolbar.

- Select the Close choice on the File menu.

- Click the Close button on the right side of the window's title bar.

## Exiting

Exit an application in the following three ways:

- Click the Exit button on the toolbar.

- Select the Exit choice on the File menu.

- Click the Exit button on the right side of the application's title bar.

**Exercise 1-4**

In this exercise, you will first tile a couple of windows, close a window, and then open a sample record.

User ID: **alincoln**          Password: **kentucky**          Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys: **NA**

1. On the **Window** menu, select the **Enter Test Results** choice. LIMS displays the Enter Test Results window.

2. To close the active window, click the **Close** button.

3. To exit the application, click the **Exit SiteManager LIMS** button. LIMS displays a message prompting you to verify your decision.

4. In the message, click the **Yes** button.

5. In SiteManager, on the toolbar, click the **Exit SiteManager** button.

*You've controlled window display, closed and exited.*

# Changing Security Groups

Your system administrator grants access to SiteManager LIMS windows and panels by assigning security groups to users. Your SiteManager user ID, when assigned to a security group, determines the windows to which you have access. Most users will belong to only one security group, but on occasion, a user may need to have access to more than one group.

If your user ID is assigned to only one group, LIMS displays the Navigation Panel with the functions available to that security group. If you log on with a user ID assigned to multiple security groups, SiteManager LIMS will prompt you to select a security group from the Select Group window before displaying the Navigation Panel.
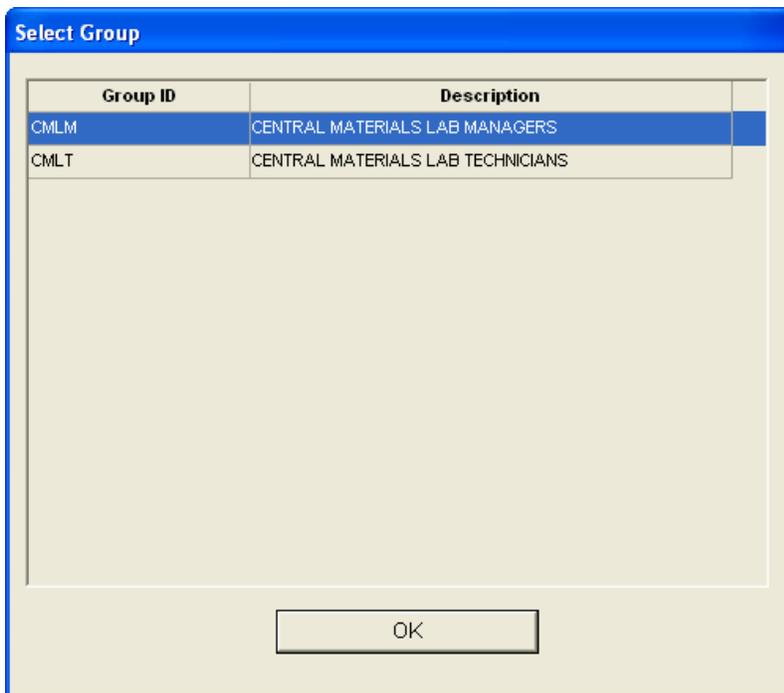


Figure 1-7.  Select Group Window

# Review

To start SiteManager:

1. On your desktop, double-click the SiteManager desktop icon.

To log on to SiteManager:

1. Start SiteManager.

2. On the SiteManager Logon window, in the **User ID** field, type your user ID.

3. Press the **Tab** key.

4. In the **Password** field, type your password.

5. Click **OK**.

To open more than one window:

1. Open the first window of SiteManager.

2. Open the SiteManager Panel.

3. Open the other window of SiteManager.

To tile windows:

1. Open the number of windows that you want to tile.

2. Click the **Window** menu.

3. Click the **Tile Horizontally** choice.

4. Click the **Tile Vertically** choice.

To cascade windows:

1. Open the number of windows that you want to cascade.

2. Click the **Window** menu.

3. Click the **Cascade** choice.

To navigate between cascaded windows:

1. Click the visible portion of the window you want to view.

To layer windows:

1. Open the number of windows that you want to layer.

2. Click the **Window** menu.

3. Click the **Layer** choice.

To navigate between layered windows:

1. Click the **Window** menu.

2. From the list, click the name of the window you want to view.

To close a window:

1. On the toolbar, click the **Close** button.

or

1. Click the **File** menu.

2. Click the **Close** choice.

or

1. On the window's title bar, click the **Close** button.

To start (and log on to) LIMS:

1. On the desktop, double-click the **LIMS** desktop icon.

2. In the SiteManager LIMS Login window, in the **User ID** field, type your user ID.

3. In the **Password** field, type your password.

4. In the **Connect to** dropdown list, select the **Server** or **Standalone** choice.

or

1. In SiteManager, open the Maintain Sample Information window.

2. On the toolbar, click the **LIMS** button.

To change security groups:

1. Using a user ID that belongs to multiple security groups, log on to LIMS.

2. In the Select Group window, select a security group.

3. Click the **OK** button.

To exit LIMS:

1. On the toolbar, click the **Exit** button.

or

1. Click the **File** menu.

2. Click the **Exit** choice.

or

1. On the application's title bar, click the **Exit** button.

# 2. Assigning Destination Labs and Tests

In this chapter, you will receive instruction about the following:

# Understanding the General Workflow

The following diagram shows the general workflow between SiteManager software's Materials Management and LIMS components. The highlighted area denotes the functionality addressed in this chapter.



Figure 2-1.  General Workflow – Assigning Destination Labs and Tests – Detail

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# Modifying Sample Records

To send a sample record into LIMS, assign a destination lab and tests.

## Recording Other Sample Data

To assign the sample to a destination lab, use the Maintain Sample Information window's Other panel. If you have a sample intended for multiple destination labs, add a row for each location.

**Note:** If you have not assigned a destination lab, SiteManager displays a message to inform you when you attempt to assign tests.
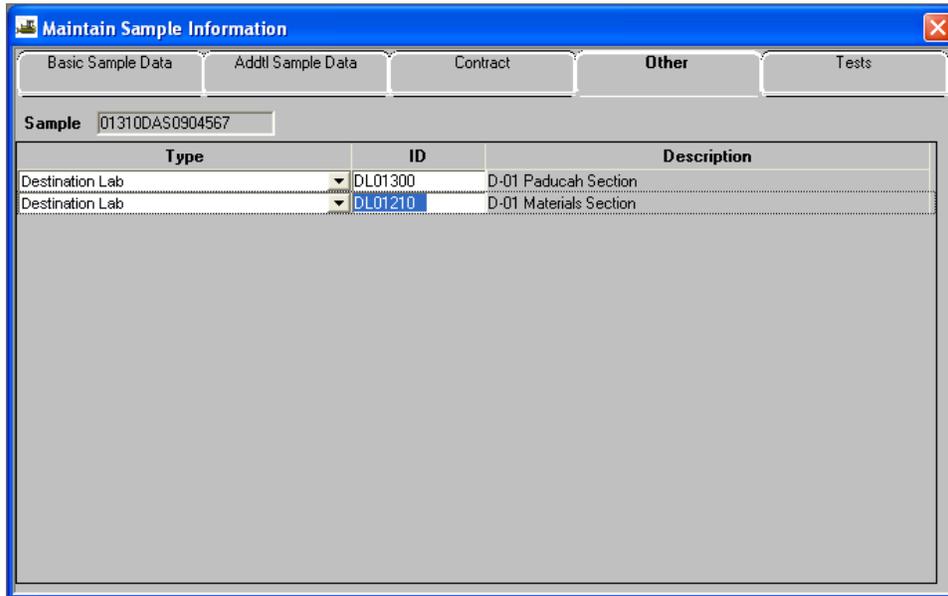


Figure 2-2.  Maintain Sample Information Window – Other Panel

| Field Name | Description |
|---|---|
| Sample | Identifies sample. |
| Type | For Non-Construction types of contracts, select the type of non-construction contract. For LIMS samples, select the Destination Lab choice. |
| ID | Select the appropriate destination where the sample will be tested. |
| Description | Full description of the selected destination lab. |

Table 2-1.  Maintain Sample Information Window – Other Panel – Fields

## Understanding Lab Hierarchy in LIMS

The following figure demonstrates the structure of the labs and the importance of selecting the correct destination lab as it relates to its flow through LIMS.
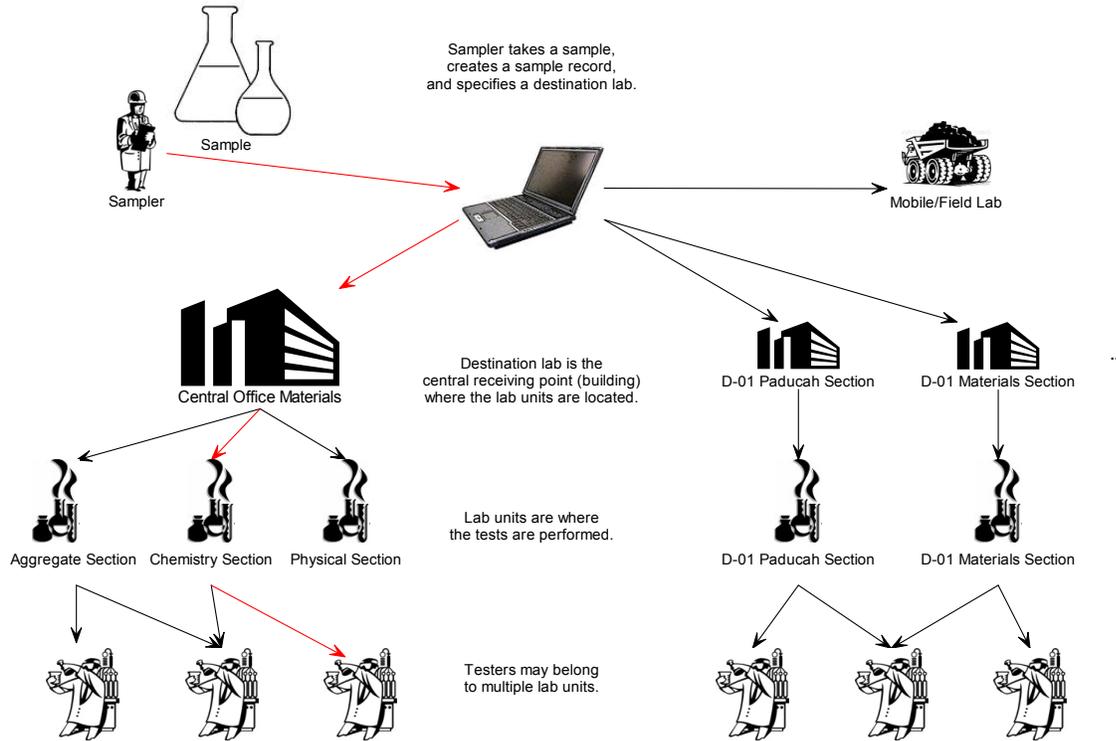


Figure 2-3.  KYTC Lab Hierarchy in LIMS

**Exercise 2-1**

In this exercise, learn how to assign a destination lab for a sample.

User ID: **dsawyer**      Password: **kentucky**      Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **NA**

1.  Start and log on to SiteManager as user **dsawyer**.
    SiteManager displays the SiteManager Panel window.

2.  Double-click the **Materials Management** icon.
    SiteManager displays the **Materials Management** panel.

3.  Double-click the **Sampling and Testing** icon. SiteManager
    displays the **Sampling and Testing** panel.

4.  Double-click the **Sample Information** icon. SiteManager
    displays the Maintain Sample Information window.

5.  On the toolbar, click the **Open** button. SiteManager displays
    the Select Sample window.

6.  In the **Sample** area, click the **Sample ID** column heading.
    SiteManager makes the **Find** field available.

7.  In the **Find** field, type **4567**. SiteManager selects the
    01310DAS0904567 sample record.

8.  Click the **OK** button. SiteManager displays the Maintain
    Sample Information window.

9.  Click the **Other** tab. SiteManager displays the **Other** panel.

Now, let's add the first destination lab.

10. In the **Type** dropdown list, select the **Destination Lab** choice.

11. Using the right mouse button, click on the **ID** field.

12. On the object menu, select the **Search** choice. SiteManager displays the Search Window.

13. Click the **Destination Lab** column heading. SiteManager sorts the column.

14. In the **Destination Lab** column, double-click **D-01 Paducah Section**. SiteManager displays DL01300 in the ID field.

15. On the toolbar, click the **Save** button.

Now, let's add the second destination lab.

16. On the toolbar, click the **New** button. SiteManager inserts a blank row.

17. In the **Type** dropdown list, select the **Destination Lab** choice.

18. Using the right mouse button, click on the **ID** field.

19. On the object menu, select the **Search** choice. SiteManager displays the Search Window.

20. Click the **Destination Lab** column heading. SiteManager sorts the column.

21. In the **Destination Lab** column, double-click **D-01 Materials Section**. SiteManager displays DL01210 in the ID field.

22. On the toolbar, click the **Save** button.

*You've opened an existing sample record and assigned multiple destination labs.*

## Assigning Tests

To assign tests, complete all required fields for the sample record. Then, on the Other panel, assign a destination lab. Finally, on the toolbar, click the Open Assign Tests button.

To accept default tests or assign additional tests, use the Assign Sample Tests window. If you are not ready to assign tests, click the Cancel button.

The system administrator has pre-determined the default tests for materials, because you commonly perform these tests on these materials. If you desire another test for a material, you must click the More button to add additional tests. Once you save tests, you cannot reassign them from the Maintain Sample Information window; SiteManager makes the Open Assign Tests button unavailable.

**Note:** Do not assign tests on the Tests panel; instead click the Open Assign Tests button on the toolbar.
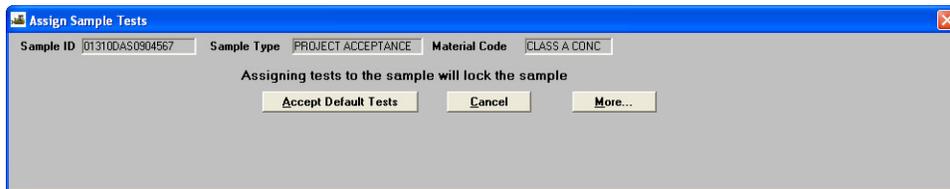


Figure 2-4.  Assign Sample Tests Window

| Field Name | Description |
|---|---|
| Sample ID | Automatically populated by the system with the value that appears on the Basic Sample Data panel. |
| Sample Type | Identifies the purpose of the sample. |
| Material Code | KYTC-specific code that identifies the material. |
| Accept Default Tests | Click this button to accept default tests automatically associated by selecting the material. |
| Cancel | Click this button to close the Assign Sample Tests window. |
| More | Click this button to expand the Assign Sample Tests window to view panes with available tests and the tests to be assigned. |

Table 2-2.  Assign Sample Tests Window – Field

## Adding Additional Tests

If you click the More button, SiteManager expands the Assign Sample Tests window to reveal additional tests and the tests to be assigned.

The Additional Available Tests pane shows tests that you can assign for that material, but these have not been assigned as default tests.

**Important!**  Pay particular attention to the Lab Unit column when selecting additional available tests. Be sure to select the appropriate test for the desired lab unit.

You only have one opportunity to assign tests. If you are unsure about changes to make, click the Cancel button. Once you click the Save Tests button, then the Open Assign Tests button is no longer available. If you mistakenly assign tests, a Lab Manager will be able to modify the assigned tests.

## Removing Tests

You can remove any test except tests marked as required. If you attempt to remove a required test, SiteManager displays a message to inform you that you cannot remove required tests.
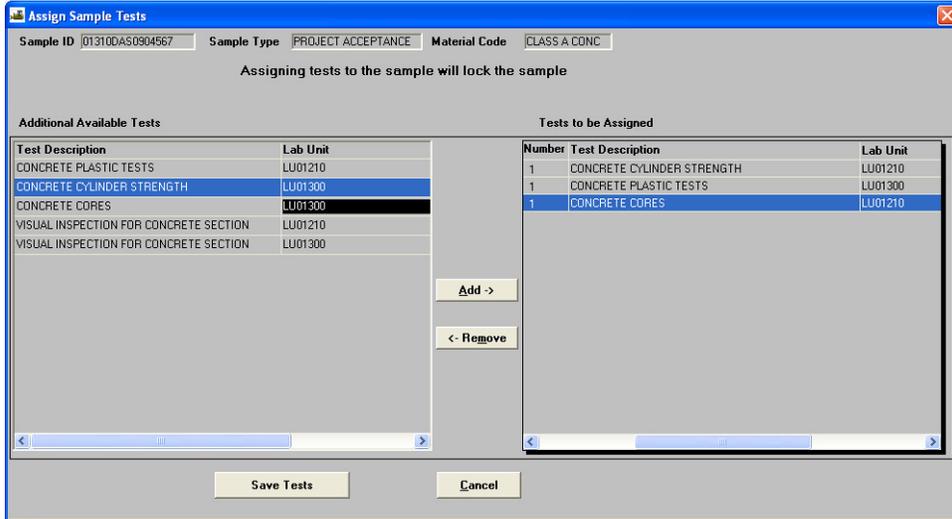


Figure 2-5. Assign Sample Tests Window (After Clicking the More Button)

| Field Name | Description |
| --- | --- |
| Sample ID | Identifies the sample. Automatically populated by the system with the value that appears on the Basic Sample Data panel. |
| Sample Type | Identifies the type of sample. |
| Material Code | KYTC-specific code that identifies the material. |
| Additional Available Tests | List of tests associated to a material, but not assigned as default tests. |
| Test Description | Description of the test. |
| Lab Unit | Lab assigned to perform the test. |
| Test Method | KYTC-defined code to identify the test. |
| Tests to be Assigned | List of defaults tests associated to a material. |
| Default Test | Indicates test is assigned to be completed, unless removed. |
| Test Rqrd | Test Required. Indicates test is required and cannot be removed. |
| Autofinalize | Indicates test does not have to be authorized in sample review assuming all tests are In Spec. |
| Add | Click to add a test to the Tests to be Assigned pane. |
| Remove | Click to remove a test from the Tests to be Assigned pane. |
| Save Tests | Click to lock the sample with the currently assigned test choices. |
| Cancel | Click to exit the Assign Sample Tests window. |

Table 2-3.  Assign Sample Tests Window (After Clicking the More Button) – Fields

**Exercise 2-2**

In this exercise, learn how to remove unnecessary tests and assign an additional test.

User ID: **dsawyer**      Password: **kentucky**      Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **01310DAS0904567** (sample ID)

1. On the toolbar, click the **Open Assign Tests** button. SiteManager displays the Assign Sample Tests window.

2. Click the **More** button. SiteManager expands the Assign Sample Tests window.

**Note**: The message on the window informs you that assigning tests to the sample will lock the sample. If you are not ready to assign tests, click the Cancel button to return to the Basic Sample Data panel.

Now, let's remove the unnecessary default tests for each lab unit.

3. In the **Tests to be Assigned** pane, click and drag the scrollbar to the right to display the **Lab Unit** column.

4. In the **Test Description** column, select the **VISUAL INSPECTION FOR CONCRETE SECTION** test for lab unit **LU01210**.

5. On your keyboard, press and hold the **Ctrl** key.

6. In the **Test Description** column, select the **VISUAL INSPECTION FOR CONCRETE SECTION** test for lab unit **LU01300**.

7. On your keyboard, release the **Ctrl** key.

8. On the Assign Sample Tests window, click the **Remove** button. SiteManager moves the test to the **Additional Available Tests** pane.

Now, let's add an additional test.

> 9. In the **Additional Available Tests** pane, in the
>    **Test Description** column, select the
>    **CONCRETE CORES** test for lab unit **LU01210**.

> 10. Click the **Add** button. SiteManager moves the test to the
>     **Tests to be Assigned** pane.

Now, let's save the tests.

**Caution!** Be sure you are finished. When you click the Save Tests
button SiteManager closes the Assign Sample Tests window,
displays the **Basic Sample Data** panel, locks the sample to prevent
modifications, and changes the status from Pending to Logged.

> 11. Click the **Save Tests** button. SiteManager closes the Assign
>     Sample Tests window.

*You've removed unnecessary tests and added an additional test.*

*Accepting Default Tests*

In LIMS, tests have been associated to materials. Based on the material you select, default tests are available to assign automatically.

**Exercise 2-3**

In this exercise, assign a single destination lab and learn how to accept the default tests assigned to a sample.

User ID:  **dsawyer**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **01310DAS0904567** (sample ID)

1. On the toolbar, click the **Open** button. SiteManager displays the Select Sample window.

2. In the **Sample** area, click the **Sample ID** column heading. SiteManager makes the **Find** field available.

3. In the **Find** field, type **0321**. SiteManager selects the 01310DAS090321 sample record.

4. Click the **OK** button. SiteManager displays the Maintain Sample Information window.

5. Click the **Other** tab. SiteManager displays the **Other** panel.

Now, let's add a single destination lab.

6. In the **Type** dropdown list, select the **Destination Lab** choice.

7. Using the right mouse button, click on the **ID** field.

8. On the object menu, select the **Search** choice. SiteManager displays the Search Window.

9. Click the **Destination Lab** column heading. SiteManager sorts the column.

10. In the **Destination Lab** column, double-click **Central Office Materials**. SiteManager displays DL00640 in the ID column.

11. On the toolbar, click the **Save** button.

12. On the toolbar, click the **Open Assign Tests** button. SiteManager displays the Assign Sample Tests window.

13. Click the **More** button. SiteManager expands the Assign Sample Tests window. View the tests to be assigned by default.

14. Click the **Save Tests** button. SiteManager closes the Assign Sample Tests window and makes the Open Assign Tests button unavailable and changes the status from Pending to Logged.

Now, let's view the tests assigned by default.

15. Click the **Tests** tab. SiteManager displays the **Tests** panel.

16. What is the name of the test you assigned? _____

*You've assigned a single destination lab and accepted default tests.*

## Printing Sample Labels

After you create a sample record in SiteManager, print a sample label. The sample label identifies the sample by the sample ID and other fields to pair the sample with the correct record in SiteManager.
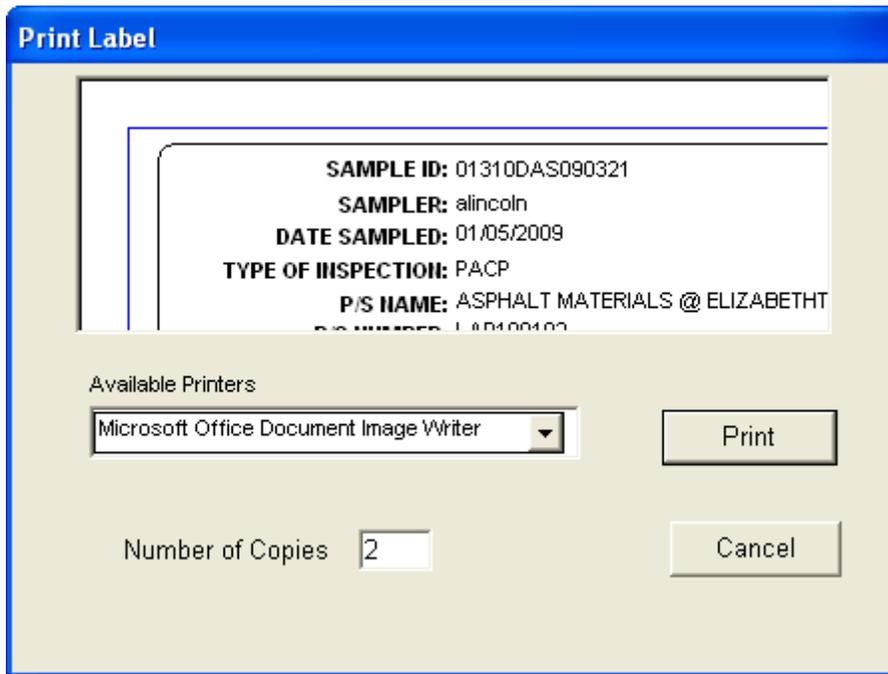


Figure 2-6.  Print Label Window

| Field Name | Description |
|---|---|
| Available Printers | Printers connections established on the computer. |
| Print | Click to print to the selected printer. |
| Number of Copies | Number of labels to print to the selected printer. |
| Cancel | Click to exit the window. |

Table 2-4.  Print Label Window – Fields

**Exercise 2-4**

In this exercise, learn how to print a label.

User ID: **dsawyer**          Password: **kentucky**          Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **01310DAS090321** (sample ID)

1.  On the toolbar, click the **Print Label** button. SiteManager displays the Print Label window.

2.  In the **Available Printers** dropdown list, select the desired choice.

3.  In the **Number of Copies** field, type **2**.

    **Note:** Do NOT click the **Print** button. This exercise is for demonstration purposes only.

4.  Click the **Cancel** button. SiteManager displays the Maintain Sample Information window's Tests panel.

*You've accessed the window where you can print sample labels.*

# Understanding Locked Samples

**Important!** If you must modify a locked sample record, but only have lower-level group access rights (for example, lab technician), contact a member of an upper-level group (for example, lab manager) to make changes.

SiteManager populates the Locked By and Lock Date fields when you save a sample record, but that only denotes the last person to modify the sample and the date the person made the change. SiteManager officially locks a sample after you assign tests. The Assign Sample Tests window includes a note to inform you that assigning tests will lock the sample. Users with the same or higher office-level access as that recorded at the bottom of the Basic Sample Data panel have rights to edit the sample record; all others have inquiry-only access.



Figure 2-7.  Maintain Sample Information Window - Basic Sample Data Panel - Lock Detail

# Review

To access the Sampling and Testing panel:

1.  On the **Main Panel**, double-click the **Materials Management** icon.

2.  On the **Materials Management** panel, double-click the **Sampling and Testing** icon.

To modify a sample record:

1.  On the **Sampling and Testing** panel, double-click the **Sample Information** icon.

2.  On the toolbar, click the **Open** button. SiteManager displays the Select Sample window.

3.  In the **Sample ID** column, scroll to and double-click the desired sample ID. SiteManager displays the Maintain Sample Information window.

4.  Change the values in the desired fields on all panels.

5.  On the toolbar, click the **Save** button.

To accept the default tests assigned to a sample:

1.  On the **Basic Sample Data** panel, click the **Open Assign Tests** button.

2.  In the Assign Sample Tests window, click the **Accept Default Tests** button.

To add tests:

1. On the **Basic Sample Data** panel, click the **Open Assign Tests** button. SiteManager displays the Assign Sample Tests window.

2. Click the **More** button. SiteManager expands the Assign Sample Tests window.

3. In the **Additional Available Tests** pane, select the desired test.

4. Click the **Add** button. SiteManager moves the test to the **Tests to be Assigned** pane.

5. Click the **Save Tests** button.

To remove tests:

1. On the **Basic Sample Data** panel, click the **Open Assign Tests** button. SiteManager displays the Assign Sample Tests window.

2. Click the **More** button. SiteManager expands the Assign Sample Tests window.

3. In the **Tests to be Assigned** pane, select the desired test.

4. Click the **Remove** button. SiteManager moves the test to the **Additional Available Tests** pane.

5. Click the **Save Tests** button.

## Summary

In this exercise, demonstrate how to assign destination labs and test to sample records.

User ID:  **dsawyer**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **NA**

1.  Open sample **01210DAS090024**.

2.  Assign the sample to destination lab **Central Office Materials**.

3.  Remove the **ASPHALT EMULSION** test.

4.  Were you able to remove the test? Why? _____
    _____

5.  Add the **SIEVE** test.

6.  Save.

7.  Exit SiteManager.

# 3. Receiving Samples in Lab Units

In this chapter, you will receive instruction about the following:

# Understanding the General Workflow

The following diagram shows the general workflow between SiteManager software's Materials Management and LIMS components. The highlighted area denotes the functionality addressed in this chapter.
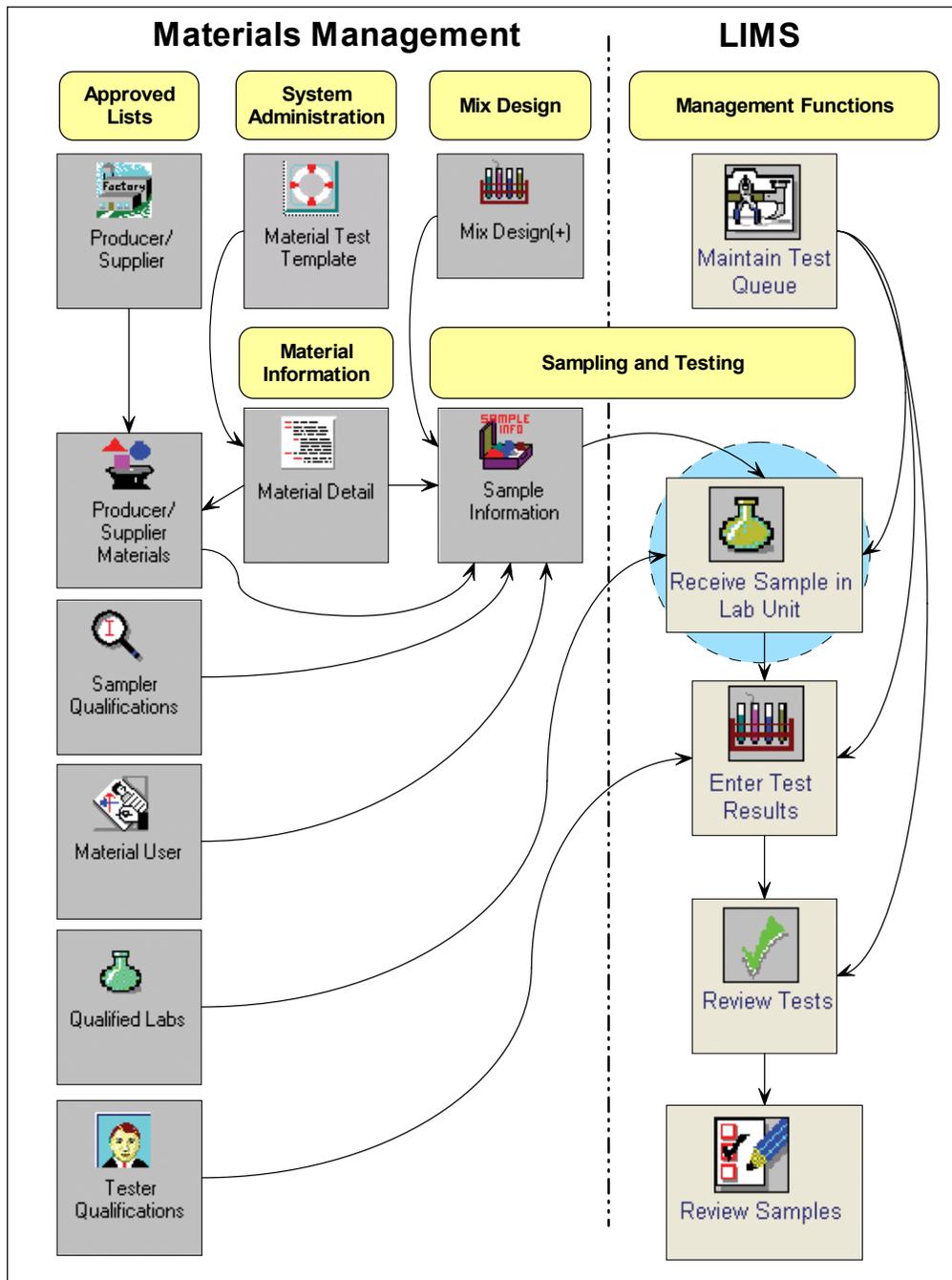


Figure 3-1.  General Workflow – Receiving Samples in Lab Units – Detail

# Receiving Samples in Lab Units

Before you can record test results in LIMS, you must receive the sample in a lab unit.

To denote that a lab unit received the sample, an authorized lab user opens the Receive Sample in Lab Unit window and selects the Sample Received check box. LIMS removes the sample record from the Receive Sample in Lab Unit window and makes the tests assigned to the sample available in the Enter Test Results window.

**Usage:** All labs receive samples directly at a lab unit. Most lab users will belong to a single lab unit.
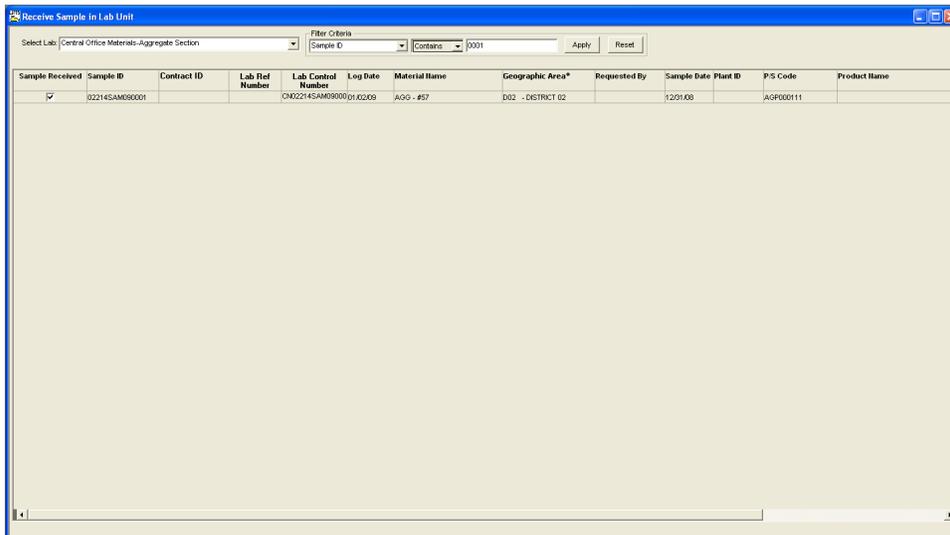


Figure 3-2: SiteManager LIMS - Receive Sample in Lab Unit Window

| Field Name | Description |
|---|---|
| Select Lab | Select to display available tests in queue for a particular lab unit to which you belong. |
| Filter Criteria Area | |
| Filter Criteria | Select criteria from the dropdown lists and enter text in the fields to limit the samples displayed on the window. |
| Apply | Click to activate filter criteria entered by the user. |
| Reset | Click to clear filter criteria. |
| Samples to Be Received Area | |
| Sample Received | Indicates that a sample has been received at the lab unit. Defaults to No. To correctly record the received date in LIMS, tester must select the check box when receiving the physical sample in the lab unit. |
| Sample ID | Sample ID to be received. |
| Contract ID | List of all contracts assigned to the sample. |
| Seal Number | Seal number for the sample ID. |
| Destination Receive Date | Date the destination lab received the sample. Bypassed for all samples. This field will be blank. |
| Log Date | Date the sample was recorded in SiteManager. |
| Material Name | Description of the material. |
| Sample Date | Date when the sampler took the sample. |
| Geographic Area * | Geographic Area where the sample was taken. |
| Requested By | User ID of the person requesting the sample. |
| Sample Date | Date when the sample was taken. |
| Plant ID | Plant ID for the sample. |
| P/S Code | Producer/Supplier code for the sample. |
| Product Name | Name of the product for the sample. |
| Toolbar Buttons | |
| Remarks | Enter/view remarks associated with the selected sample. Document concerns about condition of sample at the time it was received if the condition may adversely affect testing. Append user ID and date to each remark (user ID – mm/dd/yy). |

Table 3-1.  SiteManager LIMS – Receive Sample in Lab Unit Window – Fields

 **Exercise 3-1**

In this exercise, learn how to access the Receive Sample in Lab Unit window.

User ID: **llynn**          Password: **kentucky**          Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **NA**

1. Start and log on to SiteManager LIMS as user **llynn**. LIMS displays the Navigation Panel window.

2. Double-click the **Receive Sample in Lab Unit** icon. LIMS displays the Receive Sample in Lab Unit window.

*You've accessed the Receive Sample in Lab Unit window.*

## Moving and Resizing Columns

If desired, change column widths and move locations of the columns on the window.

**Note:** Once you move or resize a column, it remains in that position until you move or adjust it again, even after you exit the window.

**Tip!** To move a column, do the following: Click and drag the desired column heading to the desired location. Release your mouse button. The column displays in the new location.

**Tip!** To resize a column, do the following: Position your mouse pointer over the line between two columns, click and drag to the desired width. Release your mouse button. The column displays with the new width.

## Selecting Labs

To filter the sample records that display in the Receive Sample in Lab Unit window by lab unit, use the Select Lab dropdown list. The Select Lab dropdown list contains choices that reflect the lab units assigned to the LIMS user.

## Understanding Filter Criteria

To limit the number of samples displayed or to find a particular sample, use the Filter Criteria area.

**Note:** The filter is case-sensitive and cannot be built on a previous filter.

**Important!** The Filter Criteria dropdown list contains all of the column headings. Some column heading descriptions have an asterisk (*) next to the field name. An asterisk means that the filter criterion uses the code value and not a description.

The window retains the filter criteria until you click the Reset button. To display certain samples each time you open the window, such as samples created by yourself, do not reset the filter.

## Understanding Column Headings

Column headings reflect the fields in the Maintain Sample Information window. If necessary, scroll to the right to view all of the available columns.

## Understanding Sample-Level Remarks

In the Receive Sample in Lab Unit window, LIMS displays any remarks entered for that sample record in SiteManager's Maintain Sample Information window. On each sample record, you can enter, view, or modify remarks.

**Exercise 3-2**

In this exercise, learn how to receive a sample in a lab unit.

User ID: **llynn**          Password: **kentucky**          Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **NA**

1. In the **Select Lab** dropdown list, verify that the **Central Office Materials – Aggregate Section** choice has been selected by default.

Now, let's create a filter.

2. In the first **Filter Criteria** dropdown list, select the **Sample ID** choice.

3. In the **Filter Criteria** text box, type **0001**.

4. Click the **Apply** button. LIMS selects the 02214SAM090001 sample record.

Now, let's review remarks.

5. On the toolbar, click the **Remarks** button. LIMS displays remarks entered in the Maintain Sample Information window.

6. In the **Remarks** field, after any existing remarks, type **SAMPLE CONTAINER ARRIVED WITH DAMAGE (LLYNN - <mm/dd/yy>)**

7. To close the Remarks window, on the toolbar, click the **Remarks** button.

*You've reviewed sample-level remarks.*

 **Exercise 3-3**

In this exercise, learn how to receive samples into a lab unit.

User ID: **llynn**          Password: **kentucky**          Connection: **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **Central Office Materials – Aggregate Section** (lab unit);
       **02214SAM090001** (sample ID)

1.  In the **Sample Received** column, select the check box.

2.  On the toolbar, click the **Save** button. LIMS adds the sample's tests to the Enter Test Results queue for the Central Office Materials – Aggregate Section unit.

Now, let's clear the filter.

3.  In the **Filter Criteria** area, click the **Reset** button.

*You've received a sample into a lab unit.*

## Receiving a Sample in Multiple Labs

Some samples have assigned tests that require personnel to perform tests in different labs. Each lab unit must receive the sample separately in the Receive Sample in Lab Unit window.

 **Exercise 3-4**

In this exercise, receive a sample destined to be received by multiple lab units.

User ID: **llynn**          Password: **kentucky**          Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **Central Office Materials – Aggregate Section** (lab unit)

1. In the **Select Lab** dropdown list, select the **D-01 Paducah Section** choice.

Now, let's create a filter.

2. In the first **Filter Criteria** dropdown list, select the **Log Date (mm/dd/yy)** choice.

3. In the second **Filter Criteria** dropdown list, select the **Equals** choice.

4. In the **Filter Criteria** text box, type **01/02/09**.

5. Click the **Apply** button. LIMS selects the 01312JAN080001 sample.

Now, let's receive the sample for the first lab unit.

6. In the **Sample Received** column, select the check box.

7. On the toolbar, click the **Save** button. LIMS adds the sample's tests to the Enter Test Results queue for the D-01 Paducah Section unit.

Now, let's select the second lab unit to receive the sample.

8. In the **Select Lab** dropdown list, select the **D-01 Materials Section** choice.

Now, let's receive the sample for the second lab unit.

9. In the **Sample ID** column, select **01312JAN080001**.

10. In the **Sample Received** column, select the check box.

11. On the toolbar, click the **Save** button. LIMS adds the sample's tests to the Enter Test Results queue for the D-01 Materials Section unit.

Now, let's clear the filter.

12. In the **Filter Criteria** area, click the **Reset** button.

*You've received a sample into multiple lab units.*

# Review

To receive a sample in a lab unit:

1. On the **LIMS** panel, double-click the **Receive Sample in Lab Unit** icon.

2. In the **Sample Received** column, click to select check box for the sample(s) you received.

3. On the toolbar, click the **Save** button.

# Summary

In this exercise, demonstrate how to receive a sample in a lab unit.

User ID: **llynn**          Password: **kentucky**          Connection: **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **D-01 Materials Section** (lab unit)

1. Select the **Central Office Materials – Aggregate Section** lab unit.

2. Create a filter and apply it to select the **01312JAM090323** sample record.

3. Add a remark to state that **the sample container was damaged**. Include **user ID** and **date** in the correct format.

4. Receive the sample in the lab unit.

5. Save.

6. Clear the filter.

7. Exit SiteManager LIMS.

# 4. Entering Test Results

In this chapter, you will receive instruction about the following:

# Understanding the General Workflow

The following diagram shows the general workflow between SiteManager software's Materials Management and LIMS components. The highlighted area denotes the functionality addressed in this chapter.
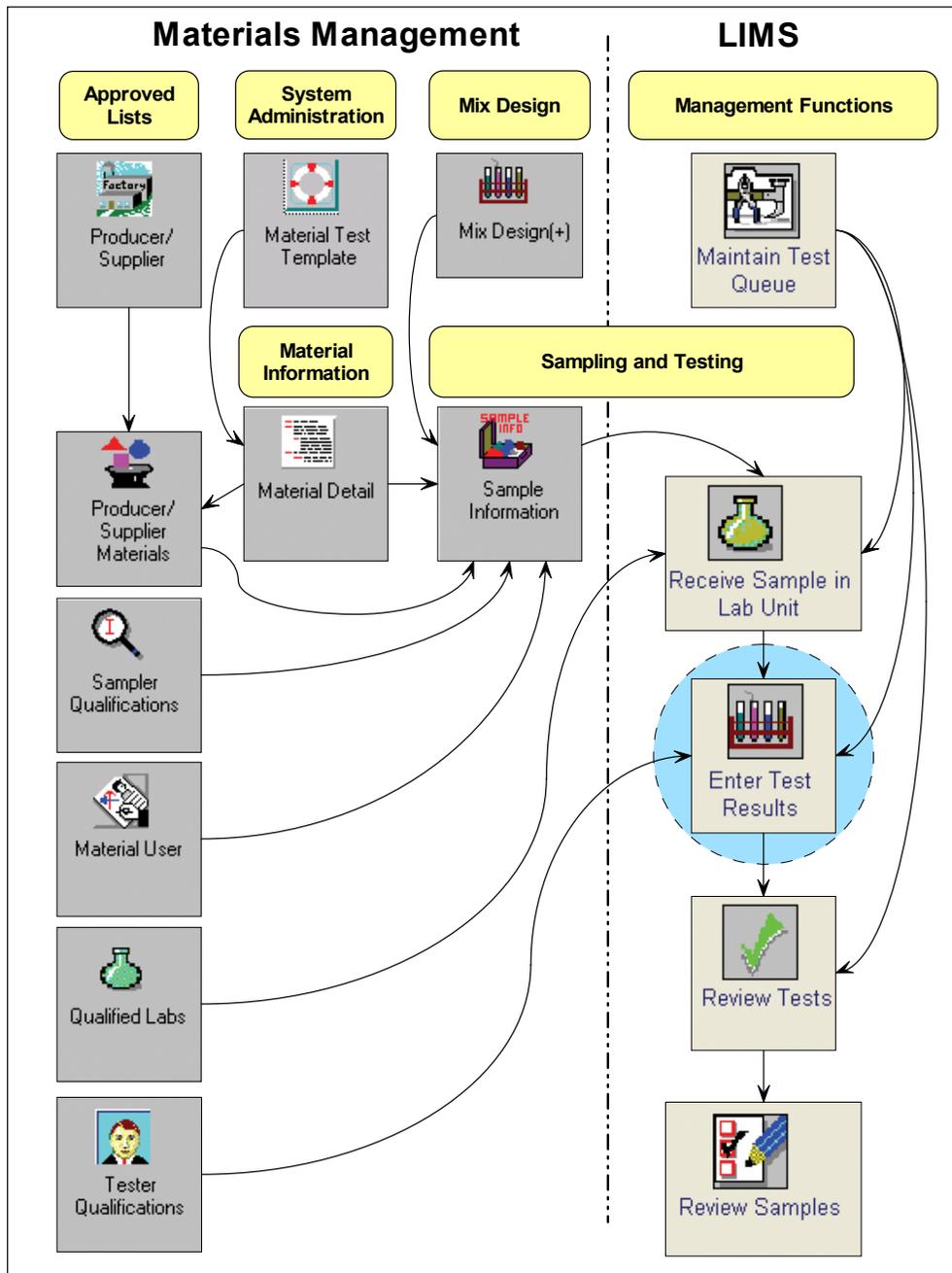


Figure 4-1.  General Workflow – Entering Test Results – Detail

# Entering Test Results

To access the test templates in which you record test results, use the Enter Test Results window. Until you receive the sample in the lab unit, you will not see the test in the Enter Test Results queue.

In the upper pane, each row represents individual tests assigned to a sample. When you select a row, the lower pane displays the test template. Record the test results in the test template.

When finished, select the Test Completed check box and click the Save button. The system removes the test from the Enter Test Results queue and adds the test results to the Review Tests queue for review.

**Note:** As you select different rows, LIMS displays the corresponding test templates in the lower pane.



Figure 4-2: SiteManager LIMS - Enter Test Results Window

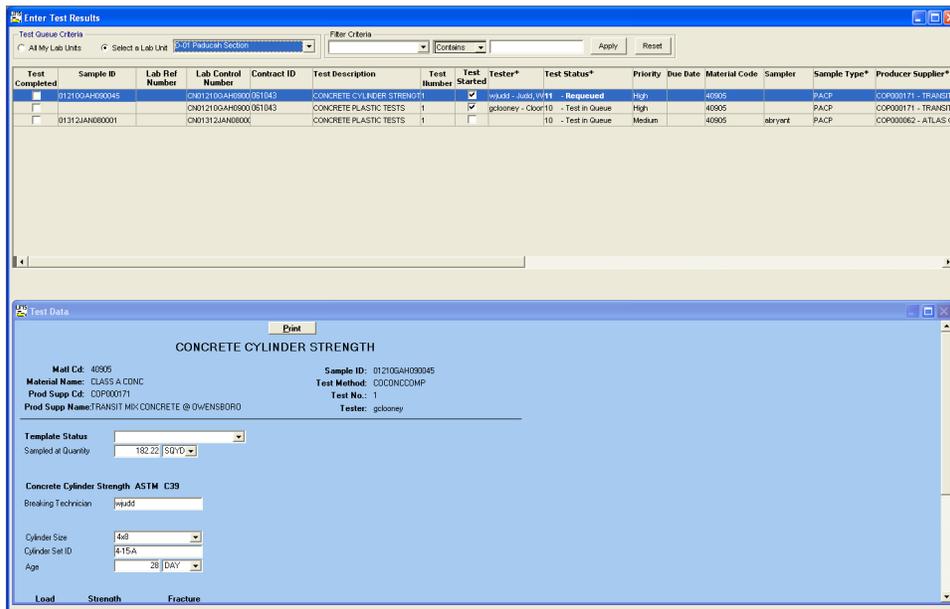| Field Name | Description |
|---|---|
| **Test Queue Criteria** | |
| All My Lab Units | Select to display available tests in queue for all lab units to which you belong. |
| Select Lab | Select to display available tests in queue for a particular lab unit to which you belong. |
| **Filter Criteria** | |
| Filter Criteria | Select criteria from the dropdown lists and enter text in the fields to limit the tests displayed on the window. |
| Apply | Click to activate filter criteria entered by the user. |
| Reset | Click to clear filter criteria. |
| **Test to Be Completed Area** | |
| Test Completed | Indicate that a sample test is complete. Select check box when the test is ready for review. |
| Sample ID | Identifies sample. |
| Lab Control Number | An umbrella number used to link samples. May use during sample review to process multiple samples at once. |
| Lab Reference Number | Simplified sample identifier used in the labs. |
| Seal Number | Seal number on the batch of the material tested. |
| Control Number | Actual number for the type of control to identify the sample. |
| Contract ID | Identifies the contract. |
| Test Description | Describes the test method. |
| Test Number | Indicates run of the test on the sample. |
| Test Started | Indicates whether tester has started test. Select the check box when the test has begun. Save. |
| Tester * | Tester assigned by the supervisor to perform or oversee the test. Optional. |
| Test Status * | Current status of the test. If Requeued or Retest Ordered, perform these tests before others in the queue. |
| Priority | Priority assigned to the test by the supervisor. Defaults to Medium. Optional. |
| Due Date | Due date assigned to the test by the supervisor. Optional. |
| Sample Type * | Indicates type of sample. |
| Material Code | Identifies the material. |
| Lab Unit | Indicates where the test will be performed. |
| Sampler | User ID of the person who took the sample. |
| Producer Supplier* | Producer/supplier of the material in the sample. |
| Receive Date | Date when the sample was received in the lab unit. |
| Manufacturer * | Manufacturer of the material in the sample. |

| Field Name | Description |
|---|---|
| Sample Date | Date the sampler took the sample. |
| Effective Date | Identifies date of specification selected for checks against the test template. |
| Toolbar Buttons | |
| Remarks | Enter/View remarks associated with the selected test. Record all remarks for the test into the appropriate internal or public remarks type. |
| | **Internal** – Remarks intended for KYTC lab personnel. Users with access to the following windows have access to these internal remarks: |
| | ▪ SiteManager Maintain Sample Information window's Tests panel |
| | ▪ LIMS Enter Test Results |
| | ▪ LIMS View-Only Sample Information window's Test Status panel |
| | ▪ LIMS Maintain Test Queue |
| | **Public** – Remarks intended to be displayed for KYTC personnel and printed on reports for external use. |
| Add Testers | Click to open the Add Testers window. Add testers to the selected test. If you edit the test results, LIMS automatically adds your name to the Add Testers window's 'Testers already assigned to the sample' pane. |
| | If entering data on behalf of a tester, select the name of the tester who performed the test. Record the names of all testers. |

Table 4-1.  SiteManager LIMS - Enter Test Results Window – Fields




**Exercise 4-1**

In this exercise, learn to open the Enter Test Results window.

User ID:  **wjudd**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **NA**

1. Start and log on to SiteManager LIMS as user **wjudd**. LIMS displays the Navigation Panel window.

2. Double-click the **Enter Test Results** icon. LIMS displays the Enter Test Results window.

*You've accessed the Enter Test Results window.*

## Selecting Labs

The Test Queue Criteria area contains both the All My Lab Units and the Select a Lab Unit buttons. Your selection determines if LIMS displays the tests in all lab units assigned to you or tests in an individual lab unit assigned to you.

## Understanding Filter Criteria

To help define data displayed on the window, the Filter Criteria dropdown list has the additional fields from the Enter Test Results window available for you to choose.

## Determining Available Tests with Contract Authority

**Note:** LIMS displays only the samples assigned to your lab unit(s).

If a tester does not have contract authority, then LIMS does not display the test on the Enter Test Results queue even if the test is assigned to the lab unit to which the user belongs.



Figure 4-3:  SiteManager LIMS - Enter Test Results Window (filter applied)

**Exercise 4-2**

In this exercise, learn how to view tests in the tester's queue.

User ID: **wjudd**          Password: **kentucky**          Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **D-01 Paducah Section** (lab unit)

1. In the **Test Queue Criteria** area, in the **Select a Lab Unit** dropdown list, select the **Central Office Materials – Liquid Asphalt Section** choice.

Now, let's apply a filter.

2. In the first **Filter Criteria** dropdown list, select the **Contract ID** choice.

3. In the second **Filter Criteria** dropdown list, select the **Equals** choice.

4. In the **Filter Criteria** text box, type **061043**.

5. Click the **Apply** button. LIMS selects the ASPHALT BINDER test for sample 012130JTG09734. LIMS displays the test template in the lower pane.

*You've viewed the list of tests available for the selected contract.*

## Understanding Material Test Templates

To record test results, use material test templates. When you select a test row in the upper pane, then LIMS displays the material test template in the lower pane.

To compare test results against specification requirements, some tests use a material test specification with a minimum and maximum value range. Since this material specification can change over time, select the desired specification by effective date.



Figure 4-4: SiteManager LIMS - Enter Test Results Window - Test Data – Detail

**Exercise 4-3**

In this exercise, learn how to enter test results.

User ID:  **wjudd**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **Central Office Materials – Liquid Asphalt Section** (lab unit)

1.  In the Test Data window, click the **Maximize** button. LIMS displays the enlarged window.

Now, let's record the test data.

2.  In the **Bottle 1** column for the **Weight before oven aging** field, type **202.7295**.

3.  In the **Bottle 1** column for the **Weight after oven aging field**, type **202.7034**.

4.  In the **Bottle 2** column for the **Weight before oven aging** field, type **205.8535**.

5.  In the **Bottle 2** column for the **Weight after oven aging field**, type **205.8265**.

6.  In the **Original Dynamic Shear (T 315) *** field, type **3.12**.

7.  In the **RTFO Dynamic Shear (T 315) *** field, type **6.04**.

8.  In the **PAV Dynamic Shear (T 315) *** field, type **3818**.

9.  In the **BBR m-Value (T 313) *** field, type **0.322**.

10. In the **BBR stiffness (T 313) *** field, type **164**.

11. On your keyboard, press the **Tab** key. SiteManager calculates the fields.

12. In the **Template Status** dropdown list, select the **In Spec** choice.

13. In the Test Data window, on the title bar, click the **Restore Down** button. LIMS restores the window.

Now, let's save the test data.

14. On the toolbar, click the **Save** button.

Now, let's mark the test as complete.

15. In the upper pane, in the **Test Completed** column, select the check box.

16. On the toolbar, click the **Save** button. LIMS removes the test from the queue.

17. To clear the filter, in the **Filter Criteria** area, click the **Reset** button. LIMS displays the remaining tests in the queue for this technician in this lab unit.

*You've completed a test.*


## Understanding Test Statuses

After you mark a test as complete, LIMS makes the test available for review in the Review Tests window.

LIMS changes the test status and test number depending on where the test is in the LIMS workflow. Use test statuses to understand the actions performed on a test and to monitor where the test is in the LIMS workflow. Depending on the test status, the test will appear in different queues.

*See also: Maintaining Test Queues*

| Code and Test Status | Description |
|---|---|
| 0 - Test Canceled | ▪ Appears in Maintain Test Queue window only.<br>▪ No modifications allowed. |
| 01 - Test Initialization | ▪ Appears only in windows available to the system administrator. |
| 05 - Test Assigned | ▪ Appears in Maintain Test Queue window. |
| 10 - Test in Queue | ▪ Appears in Enter Test Results window.<br>▪ Appears in Maintain Test Queue window.<br>▪ New test in the queue.<br>▪ Test number is one. |
| 11 - Requeued | ▪ Appears in Enter Test Results window.<br>▪ Appears in Maintain Test Queue window.<br>▪ Sent back to tester.<br>▪ Test number is one. |
| 20 - Was Retested | ▪ Appears in Enter Test Results window.<br>▪ Appears in Maintain Test Queue window.<br>▪ Ordered another test.<br>▪ Test number will be two or higher if other retests are ordered. |
| 21 - Retest Ordered | ▪ Appears in Enter Test Results window.<br>▪ Appears in Maintain Test Queue window.<br>▪ Reordered original test.<br>▪ Test Number is one.<br>▪ No modifications allowed. |
| 40 - Test Completed | ▪ Appears in Review Tests window.<br>▪ Appears in Maintain Test Queue window.<br>▪ No modifications allowed. |
| 50 - Revwd by Line Supvsr | ▪ Appears in Maintain Test Queue window. |
| 60 - Test Approved by Lab Supervisor | ▪ Appears in Maintain Test Queue window. |
| 80 - Finalized | ▪ Appears only in windows available to the system administrator. |
| 81 - Back to Lab | ▪ Appears in Review Tests window.<br>▪ Appears in Maintain Test Queue window.<br>▪ If other tests were associated to the sample, then all linked tests will appear back in the Maintain Test Queue window with a test status of 60 – Test Approved by Lab Supervisor. |

Table 4-2.  SiteManager LIMS - Test Statuses (as defined for training)

# Handling Requeued Tests

When a tester receives a requeued test, the tester should re-examine the test results. Requeued tests always appear at the top of the Enter Test Results queue.

**Exercise 4-4**

In this exercise, learn how to handle a requeued test.

User ID: **wjudd**          Password: **kentucky**          Connection: **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **Central Office Materials – Liquid Asphalt Section** (lab unit)

1.  At the top of the **Test Status** column, select the
    **11 – Requeued** test.

Now, let's review the remarks.

2.  On the toolbar click the **Remarks** button. LIMS displays the remarks window.

3.  To see why the test was requeued, click the
    **Requeue Comments** remark type.

4.  To close the remarks window, on the toolbar, click the
    **Remarks** button again.

Now, let's examine the values and make any necessary changes.

5.  In the Test Data window, click the **Maximize** button. LIMS displays the enlarged window.

6.  In the **BBR m-Value (T 313) *** field, type **0.322**.

7.  On your keyboard, press the **Tab** key.

8.  In the Test Data window, on the title bar, click the **Restore Down** button. LIMS restores the window.

9.  On the toolbar, click the **Save** button.

Now, let's add a remark.

10. On the toolbar click the **Remarks** button. LIMS displays the remarks window.

11. Click the **Requeue Comments** remark type.

12. In the **Requeue Comments** field, type **CORRECTED THE MIS-KEYED VALUE. (WJUDD –** < mm/dd/yy >**)**

13. To close the remarks window, on the toolbar, click the **Remarks** button again.

Now, let's mark the test as complete.

14. In the **Test Completed** column, select the check box.

15. On the toolbar, click the **Save** button. LIMS removes the ASPHALT BINDER test for sample 01314HAN090003 from the test queue.

*You've reviewed remarks and corrected an incorrect value on a requeued test.*

# Handling Retests

When a tester receives an order for a retest, the tester must perform the test again on the new test record that LIMS has linked to the sample and displayed in the Enter Test Results window. The original test number will not display in the Enter Test Results window. Retests always appear at the top of the Enter Test Results queue.

**Exercise 4-5**

In this exercise, learn how to enter test results on a reordered test.

User ID: **wjudd**          Password: **kentucky**          Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **Central Office Materials – Liquid Asphalt Section** (lab unit)

1. At the top of the **Test Status** column, select the
   **21 – ReTest Ordered** test.

Now, let's review the remarks.

2. On the toolbar click the **Remarks** button. LIMS displays the
   remarks window.

3. To see why the test was ordered again, click the
   **Retest Comments** remark type.

4. To close the Remarks window, on the toolbar, click the
   **Remarks** button again.

Now, let's enter the values of the new test.

5. In the Test Data window, click the **Maximize** button. LIMS
   displays the enlarged window.

6. In the **Bottle 1** column for the **Weight before oven aging**
   field, type **202.7295**.

7. In the **Bottle 1** column for the **Weight after oven aging**
   field, type **202.7034**.

8. In the **Bottle 2** column for the **Weight before oven aging**
   field, type **205.8535**.

9. In the **Bottle 2** column for the **Weight after oven aging** field, type **205.8265**.

10. In the **Original Dynamic Shear (T 315) \*** field, type **3.12**.

11. In the **RTFO Dynamic Shear (T315) \*** field, type **6.04**.

12. In the **PAV Dynamic Shear (T315) \*** field, type **3818**.

13. In the **BBR m-Value (T 313) \*** field, type **0.322**.

14. In the **BBR stiffness (T313) \*** field, type **164**.

15. On your keyboard, press the **Tab** key. SiteManager calculates the fields.

16. In the **Template Status** dropdown list, select the **In Spec** choice.

17. In the Test Data window, on the title bar, click the **Restore Down** button. LIMS restores the window.

18. On the toolbar, click the **Save** button.

Now, let's add a remark.

19. On the toolbar click the **Remarks** button. LIMS displays the remarks window.

20. Click the **Retest Comments** remark type.

21. In the **Retest Comments** field, type **RETEST PASSED. (WJUDD -** < mm/dd/yy >**)**

22. To close the Remarks window, on the toolbar, click the **Remarks** button again.

Now, let's mark the test as complete.

23. In the **Test Completed** column, select the check box.

24. On the toolbar, click the **Save** button. LIMS removes the ASPHALT BINDER test for the 01312SHJ090004 sample from the queue.

*You've reviewed remarks and entered values for a retest.*

## Understanding Test-Level Remarks

Remarks available from the Enter Test Results window include both internal lab remarks and public remarks.

Only qualified lab personnel can enter and view the internal lab remarks in the Enter Test Results, Review Tests, and Maintain Test Queue windows.

All users may use the View-Only Sample Information window to view public remarks.

## Handling Tests with Assigned Priorities

LIMS assigns a default test priority of Medium to tests. If you encounter a High or Low priority in the Priority column, you can use the status to manage your test completion order. Tests with a High priority sort to the top of the Enter Test Results window immediately after any retests or requeued tests.

**Important!** LIMS does not display a warning if you perform a test with a lower priority before you perform tests with a High priority.

## Handling Tests with Assigned Testers

If you encounter a test with an assigned tester in the Tester column, only the specified tester should perform the test.

**Important!** LIMS does not restrict testers other than the specified tester from performing the test. All qualified testers in that lab unit will continue to have access to that test.

**Usage:** Labs will enforce a business rule that if a supervisor assigns a tester to a test, the supervisor expects that tester to complete the test.

## Handling Tests with Assigned Due Dates

If you encounter a test with an assigned due date in the Due Date column, try to perform the test before the specified date.

**Important!** LIMS does not display a message to warn you if you do not perform the test before the due date.

**Exercise 4-6**

In this exercise, learn how to enter test results on a test assigned a due date, add an internal remark, and add a tester.

User ID: **wjudd**          Password: **kentucky**          Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **Central Office Materials – Liquid Asphalt Section** (lab unit)

1.  In the first **Filter Criteria** dropdown list, select the **Due Date (mm/dd/yy)** choice.

2.  In the second **Filter Criteria** dropdown list, select the **Equals** choice.

3.  In the **Filter Criteria** text box, type **01/27/09**.

4.  Click the **Apply** button. LIMS selects the 01210DAA090478 sample record.

Now, let's answer a couple questions.

5.  What is the priority? _____

6.  To whom did the supervisor assign this test? _____

Now, let's add an internal remark.

7.  On the toolbar, click the **Remarks** button. LIMS displays the Remarks window.

8.  In the **Internal Comments** field, type **JDAVIS RECORDED RESULTS ON PAPER. ADDED JDAVIS AS TESTER. (WJUDD -** < mm/dd/yy >**)**

9.  To close the Remarks window, on the toolbar, click the **Remarks** button again.

10. On the toolbar, click the **Save** button.

Now, let's add a tester.

11. On the toolbar, click the **Add Testers** button. LIMS displays the Add Testers window.

12. In the **Additional testers available for assignment** pane, in the **Tester** column, select **jdavis**.

13. Click the **Add** button. LIMS moves the tester to the **Testers already assigned to the sample** pane.

14. Click the **OK** button. LIMS closes the Add Testers window and displays the Enter Test Results window.

Now, let's mark the test as complete.

15. In the **Test Completed** column, select the check box.

16. On the toolbar, click the **Save** button. LIMS removes the test from the queue.

17. To clear the filter, click the **Reset** button.

*You've entered test results on a test assigned a due date, added an internal remark, and added a tester.*

# Review

To enter test results:

1. On the **LIMS** panel, double-click the **Enter Test Results** icon.

2. Select the sample's test row.

3. Enter the test results for the test.

4. In the **Test Completed** column, click to select the check box for the sample you are marking complete.

5. On the toolbar, click the **Save** button.

To add testers:

1. On the toolbar, click the **Add Testers** button.

2. In the **Additional testers available for assignment** pane, in the **Tester** column, select the desired tester.

3. Click the **Add** button. LIMS moves the tester to the **Testers already assigned to the sample** pane.

4. Click the **OK** button.

# Summary

In this exercise, demonstrate how to handle a requeued test, add a tester, enter test results for multiple tests, and mark test results as test complete.

User ID: **wjudd**          Password: **kentucky**          Connection: **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **Central Office Materials – Liquid Asphalt Section** (lab unit)

1.  Select the **D-01 Paducah Section** lab unit.

2.  How many tests are associated to sample **01210GAH090045** in this window? _____

3.  Why has the **CONCRETE CYLINDER STRENGTH** test been requeued? _____

4.  In the **Load** field that displays **3417 lbs**, change the value to **53417 lbs**.

5.  Add a remark that it was corrected.

6.  Mark the test as complete.

7.  Save.

8.  For the **CONCRETE PLASTIC TESTS** test on sample **01210GAH090045**, continue the testing for **gclooney** since he is not at work today and the test has a **High** priority. In the **Concrete Temperature KM 64-318** area, in the **Temperature** field, type **83**. In the **Technician** field, type **wjudd**.

9.  Save.

10. View the Add Testers window.

11. Did LIMS automatically add **wjudd** as a tester? _____

12. Mark the test as complete.

13. Save.

14. Exit SiteManager LIMS.

# 5. Reviewing Tests

In this chapter, you will receive instruction about the following:

# Understanding the General Workflow

The following diagram shows the general workflow between SiteManager software's Materials Management and LIMS components. The highlighted area denotes the functionality addressed in this chapter.



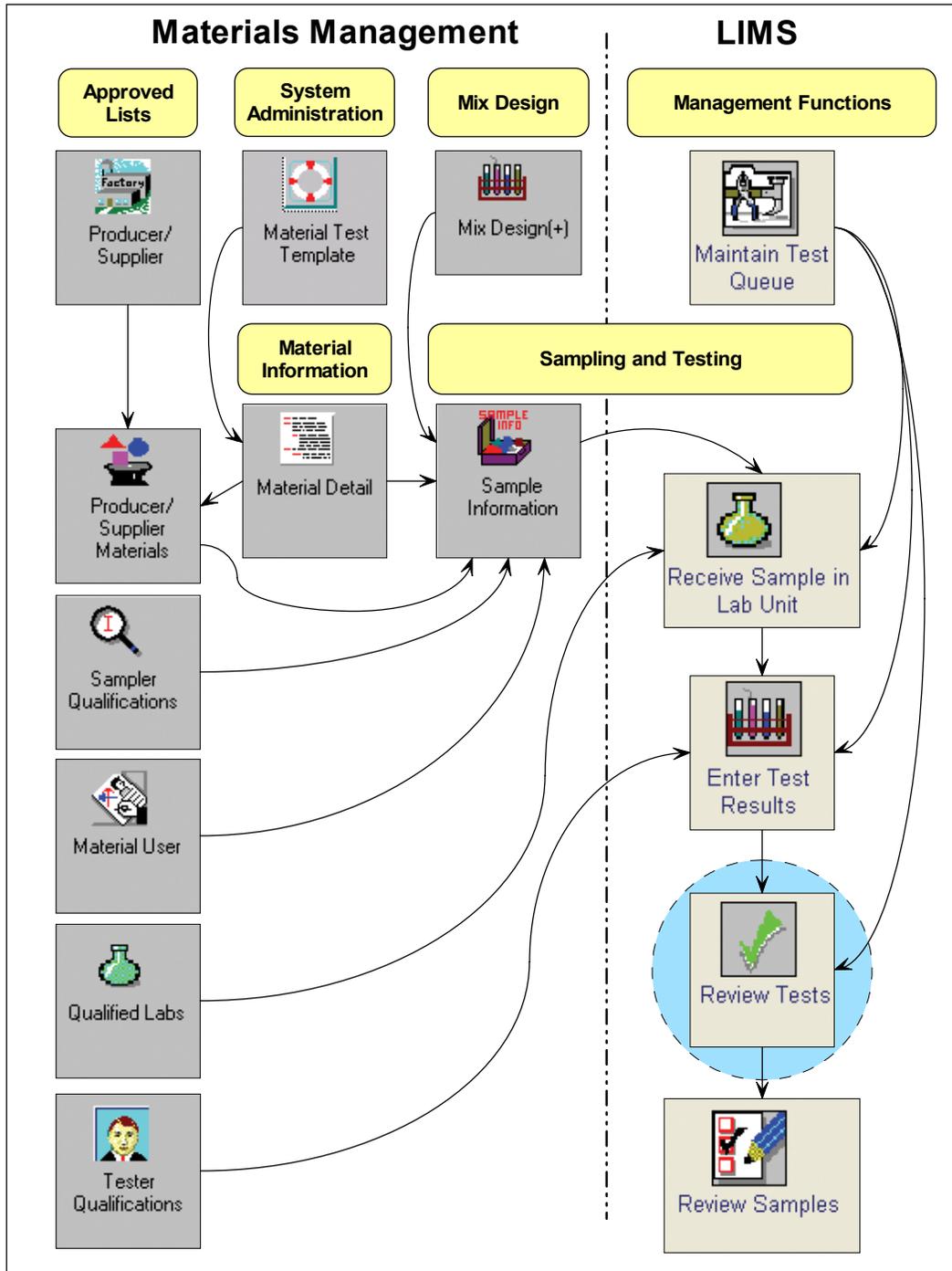Figure 5-1.  General Workflow – Reviewing Tests – Detail

# Reviewing Tests

To review the test results submitted by the tester, use the Review Tests window.

**Note:** Not all tests assigned to a sample have to be marked complete in the Enter Test Results window before the completed tests will appear in the Review Tests window.
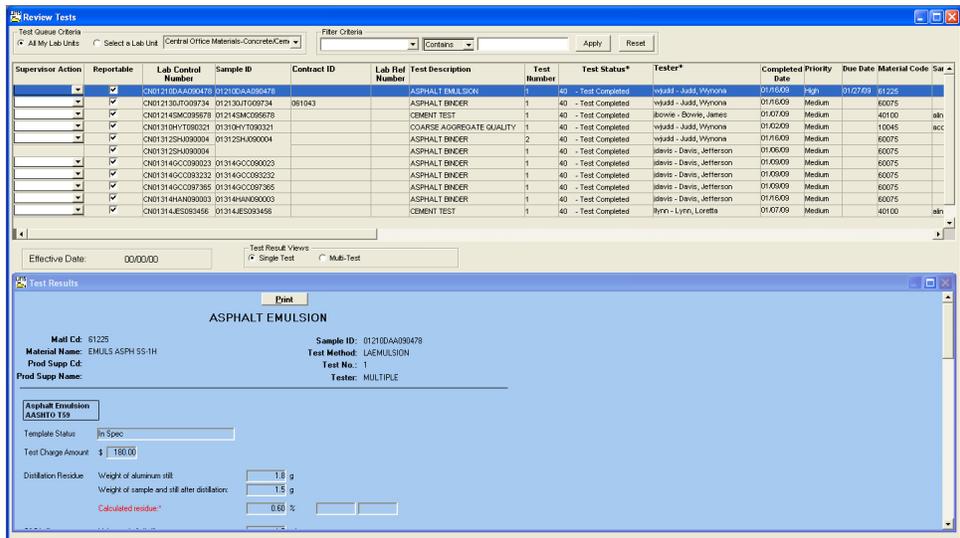


Figure 5-2.  SiteManager LIMS - Review Tests Window – Single Test Result View

| Field Name | Description |
|---|---|
| **Test Queue Criteria** | |
| All My Lab Units | Select to display available tests in queue for all lab units to which you belong. |
| Select a Lab Unit | Select to display available tests in queue for a particular lab unit to which you belong. |
| **Filter Criteria** | |
| Filter Criteria | Select criteria from the dropdown lists and enter text in the fields to limit the tests displayed on the window. |
| Apply | Click to activate filter criteria entered by the user. |
| Reset | Click to clear filter criteria. |
| **Columns** | |
| Supervisor Action | Reviewer selects the following actions to take on the test:<br><br>▪ Review Completed – Indicates the test results have been reviewed and are ready to proceed to the Review Sample window.<br>▪ Requeue – Indicates the test results should be re-examined by the tester. Detailed info about the request should be found in the Remarks window's Requeue Comments remark type.<br>▪ Order Retest – Indicates the test should be performed again (max of 5). Detailed info about the request should be found in the Remarks window's Retest Comments remark type. |
| Reportable | Indicates whether the test is reportable. Do not clear. |
| Lab Control Number | An umbrella number used to link samples. May use during sample review to process multiple samples at once. |
| Lab Reference Number | Simplified sample identifier used in the labs. |
| Sample ID | Identifies the sample. |
| Contract ID | List of all contracts assigned to the sample. |
| Test Description | Describes the test method. |
| Test Number | Indicates run of the test on the sample. |
| Test Status * | Current status of the test. |
| Tester * | Tester assigned by the supervisor to perform or oversee the test. |
| Completed Date | Date when the sample was marked as complete in the lab unit. |
| Priority | Priority assigned to the test by the supervisor. |
| Due Date | Due date assigned to the test by the supervisor. |

| Field Name | Description |
|---|---|
| Material Code | Identifies the material. |
| Producer Supplier * | Producer/supplier of the material in the sample. |
| Manufacturer * | Manufacturer of the material in the sample. |
| Sampler | User ID of the sampler. |
| Test Method | Method used to test material. |
| Sample Type* | Indicates type of sample. |
| Control Number | Actual number for the type of control to identify the sample. |
| Seal Number | Seal number on the batch of the material tested. |
| Sample Date | Date the sampler took the sample. |
| Toolbar Buttons | |
| Remarks | Enter/View remarks associated with the selected test. Enter appropriate remarks for retest and requeue. |

Table 5-1. SiteManager LIMS – Review Tests Window – Fields



### Exercise 5-1

In this exercise, learn how to access the Review Tests window.

User ID: **gclooney**    Password: **kentucky**    Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys: **All My Lab Units** (lab unit)

1. Start and log on to SiteManager LIMS as user **gclooney**.
   LIMS displays the Navigation Panel window.

2. Double-click the **Review Tests** icon. LIMS displays the
   Review Tests window.

*You've accessed the Review Tests window.*

## Selecting Labs

To display tests from all of your assigned lab units or a selected assigned lab unit, click the appropriate button in the Test Queue Criteria area.

## Viewing Results for a Single Test

When you select a test in the upper pane, the Test Results pane displays the test results in a view-only format for a single test.

## Viewing Results for Multiple Tests on the Same Template

To compare test results entered into the same test template for tests performed on several different samples, select any row with the desired test. Click the Multi-Test test result view button. LIMS displays only the rows matching the selected test template for all samples with tests to review. Then, select the specific tests to compare. Click the Compare Results button. LIMS displays a table in the Test Results pane to compare results of the same test performed across samples.
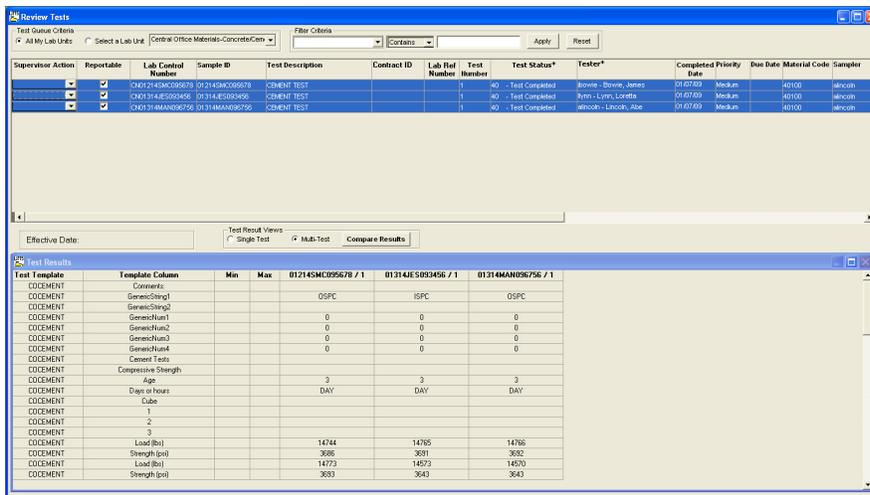


Figure 5-3.  SiteManager LIMS - Review Tests Window - Multi-Test Result View

| Field Name | Description |
| --- | --- |
| Test Template | Test template for which the comparison is being made. |
| Template Column | Field on the template. |
| Min | Minimum acceptable value for a spec template. |
| Max | Maximum acceptable value for a spec template. |
| Sample ID / Test Number | Combination of Sample ID and the sample test number selected for the grid view results comparison. |

Table 5-2.  SiteManager LIMS – Review Tests Window – Multi-Test Test Result View – Fields

**Exercise 5-2**

In this exercise, learn how to review test results for single tests and multiple tests.

User ID: **gclooney**        Password: **kentucky**        Connection: **Server**
Group Name:  **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys:  **All My Lab Units** (lab unit)

1. In the **Sample ID** column, select **01314JES093456**. LIMS displays the test results for the CEMENT TEST in the lower pane.

Now, let's review results for a single test.

2. In the **Test Results** pane, on the title bar, click the **Maximize** button.

3. Review the test results.

4. In the **Test Results** pane, on the title bar, click the **Restore Down** button.

Now, let's review results for multiple tests.

5. In the **Test Result Views** area, click the **Multi-Test** button. LIMS displays only the tests that match the selected test description.

6. Select all tests.

7. Click the **Compare Results** button. The system displays test results for all CEMENT TEST tests in the review tests queue.

8. In the **Test Results** pane, on the title bar, click the **Maximize** button.

9. Review the test results.

Now, let's prepare for the next exercise.

10. In the **Test Results** pane, on the title bar, click the **Restore Down** button.

11. In the **Test Result Views** area, click the **Single Test** button.

*You've reviewed test results.*

---

## Acting on Test Results

To determine where the test moves in the LIMS workflow based on your review, select the appropriate action from the Supervisor Action dropdown list for each test. Choices include Review Completed, Requeue, or Order Retest.

## Indicating that Results are Acceptable for Evaluation

To indicate that the test results are acceptable to evaluate in the Review Samples window, select the Reportable check box.

**Note:** By default, LIMS selects the Reportable check box.

**Warning!** If you clear the Reportable check box, the test results for the associated test will not appear in the Review Samples window and reports. If cleared, the test results will continue to display in the View-Only Sample Information and the Maintain Test Queue windows.



**Exercise 5-3**

In this exercise, learn how to mark tests as complete.

User ID: **gclooney**      Password: **kentucky**      Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys: **All My Lab Units** (lab unit)

1. In the **Test Queue Criteria** area, click the **Select a Lab Unit** button. LIMS has 'Central Office Materials-Concrete/Cement Section' selected by default.

2. In the **Test Description** column, select **CEMENT TEST** for sample **01314JES093456**.

3. In the **Supervisor Action** dropdown list, select the **Review Completed** choice.

4. On the toolbar, click the **Save** button. LIMS removes the test from the Review Tests queue and sends it to the Review Samples queue.

*You've marked a test as complete.*

## Requeueing Tests

If you want the tester to re-examine the submitted test results, then select the Requeue choice from the Supervisor Action dropdown list. Add a remark to provide a reason why the tester should reexamine the results.

Requeueing a test returns the test to the Enter Test Results queue. In the Enter Test Results window, the test has a test status of 'Requeue' with a test number of '1.'
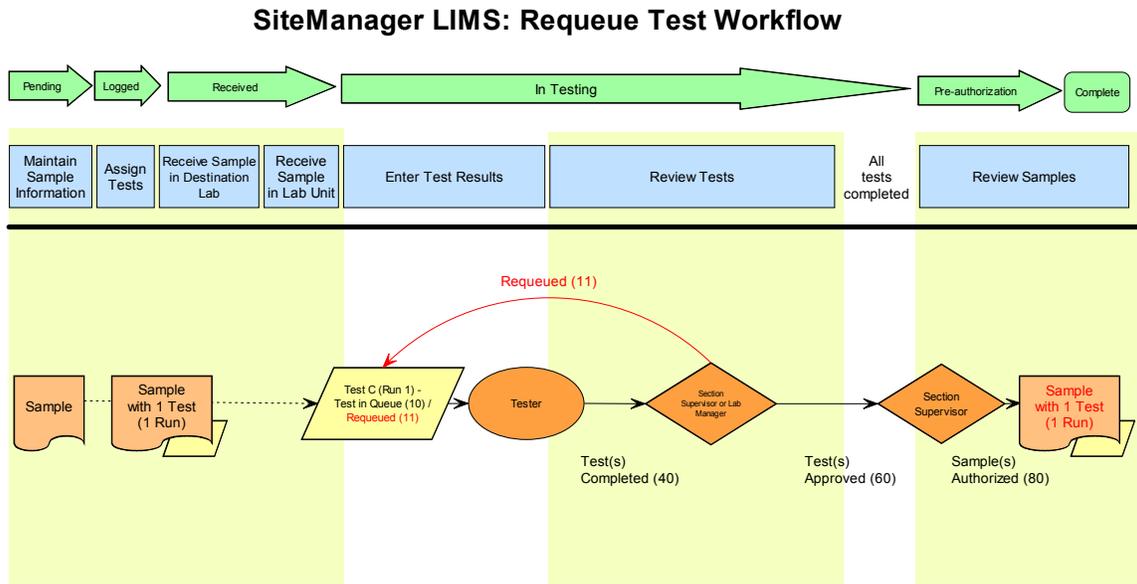
**SiteManager LIMS: Requeue Test Workflow**

Figure 5-4. Requeue Test Workflow

**Exercise 5-4**

In this exercise, learn how to requeue a test.

User ID:  **gclooney**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys:  **Central Office Materials-Concrete/Cement Section** (lab unit)

1.  In the **Test Description** column, select **CEMENT TEST**
    for sample **01314MAN096756**.

2.  In the **Supervisor Action** dropdown list, select the
    **Requeue** choice. LIMS automatically displays the Remarks
    window.

3.  Click the **Requeue Comments** remark type.

4.  In the **Requeue Comments** field, type **COMPRESSIVE
    STRENGTH IS TOO HIGH, PLEASE CHECK
    NUMBERS. (GCLOONEY -** <mm/dd/yy>**)**

5.  To close the Remarks window, on the toolbar, click the
    **Remarks** button.

6.  On the toolbar, click the **Save** button. LIMS removes the
    test from the queue.

*You've requeued a test.*

## Ordering Retests

If you want the tester to perform a test again, then the reviewer selects the Order Retest choice from the Supervisor Action dropdown list. Add a remark to provide a reason why the tester should perform the test again.

Ordering a retest links a new test to the sample and displays that test in the Enter Test Results queue. In the Enter Test Results window, the test has a test status of 'Retest Ordered' and a test number of '2' or more depending on the number of test runs already on the sample.
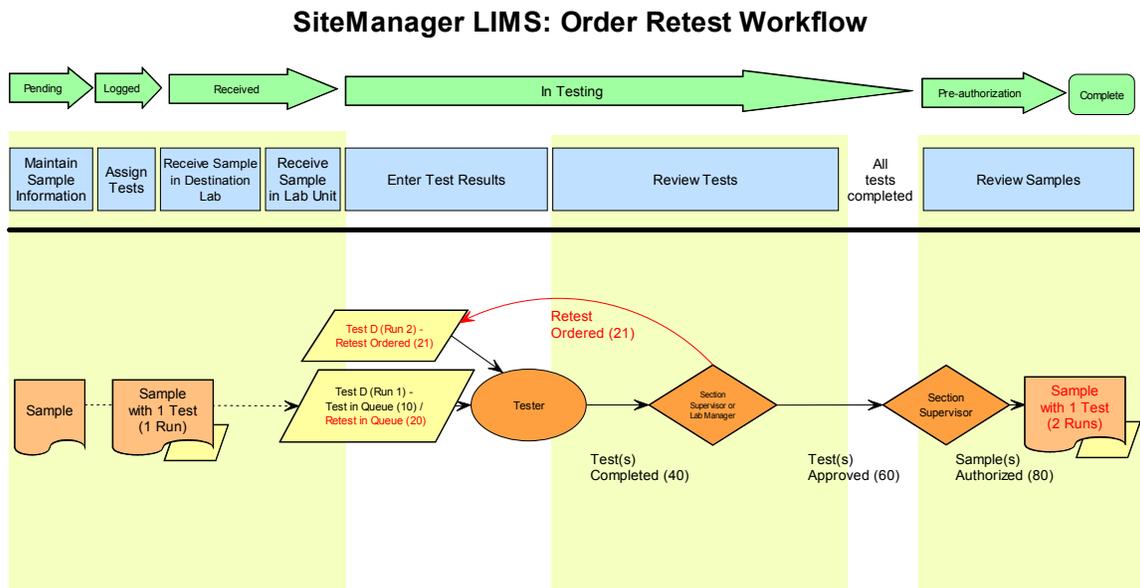
### SiteManager LIMS: Order Retest Workflow



Figure 5-5. Order Retest Workflow

**Exercise 5-5**

In this exercise, learn how to order a retest.

User ID: **gclooney**    Password: **kentucky**    Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys: **Central Office Materials-Concrete/Cement Section** (lab unit)

1.  In the **Test Description** column, select **CEMENT TEST** for sample **01214SMC095678**.

2.  In the **Supervisor Action** dropdown list, select the **Order Retest** choice. LIMS automatically prompts you to add additional runs.

3.  In the **Select Additional Runs** dropdown list, to accept the default of **1**, click the **OK** button. LIMS automatically displays the Remarks window.

4.  Click the **Retest Comments** remark type.

5.  In the **Retest Comments** field, type **PERFORM TEST AGAIN. NUMBERS ARE MUCH HIGHER THAN SPECS WILL ALLOW. (GCLOONEY -** <mm/dd/yy>**)**

6.  To close the Remarks window, on the toolbar, click the **Remarks** button.

7.  On the toolbar, click the **Save** button. LIMS removes the test from the queue.

*You've ordered a retest.*

## Auto-Finalizing Samples

After the test reviewer approves a test, LIMS first checks to see if all other tests for the sample meet specification limits or have no specification limits, and then LIMS checks to verify if those tests have been selected to auto-finalize.

If the tests meet these criteria, LIMS bypasses the Review Samples window and assigns a sample status of Completed to the sample. If the tests do not meet these criteria, LIMS handles the sample like all other samples not set to auto-finalize.

**Usage:** Per KYTC policy, all certification samples are set to auto-finalize.

# Review

To open the Review Tests window:

1. On the Navigation Panel, double-click the **Review Tests** icon.

To mark a test as complete:

1. On the Review Tests window, select a test.

2. In the **Supervisor Action** dropdown list, select the **Review Complete** choice.

3. Click the **Save** button.

To mark a test as reportable:

1. On the Review Tests window, select a test.

2. In the **Reportable** column, select the check box.

To compare multiple tests:

1. In the **Test Description** column, select the desired test.

2. In the **Test Result Views** area, click the **Multi-Test** button. LIMS displays only the tests that match the selected test description.

3. Select all desired tests to compare.

4. Click the **Compare Results** button.

5. Review the test results.

To maximize the Test Results pane:

1. In the **Test Results** pane's title bar, click the **Maximize** button.

To minimize the Test Results pane:

1. In the **Test Results** pane's title bar, click the **Restore Down** button.

To requeue a test:

1.  On the Review Tests window, select a test.

2.  In the **Supervisor Action** dropdown list, select the **Requeue** choice.

3.  Click the **Save** button.

To order a retest:

1.  On the Review Tests window, select a test.

2.  In the **Supervisor Action** dropdown list, select **Order Retest**.

3.  Click the **Save** button.

# Summary

In this exercise, demonstrate how to review tests in the Review Tests window.

User ID: **gclooney**          Password: **kentucky**          Connection: **Server**
Group Name:  **CENTRAL MATERIALS LAB MANAGERS (CMLM)**
Keys:  **Central Office Materials-Concrete/Cement Section** (lab unit)

1.  Compare multiple tests for the **ASPHALT BINDER** test.

2.  Mark the **ASPHALT BINDER** test for sample **01314GCC090023** as **Review Completed**.

3.  **Requeue** the **ASPHALT BINDER** test for sample **01314GCC093232**. Add a remark to **double-check the m-Value**.

4.  **Order a retest** with **two runs** of the **ASPHALT BINDER** test for sample **01314GCC097365**. Add a comment that **the values are very out of spec**.

5.  Return to **single test** view.

6.  Exit SiteManager LIMS.

# 6. Maintaining Test Queues

In this chapter, you will receive instruction about the following:

# Understanding the General Workflow

The following diagram shows the general workflow between SiteManager software's Materials Management and LIMS components. The highlighted area denotes the functionality addressed in this chapter.
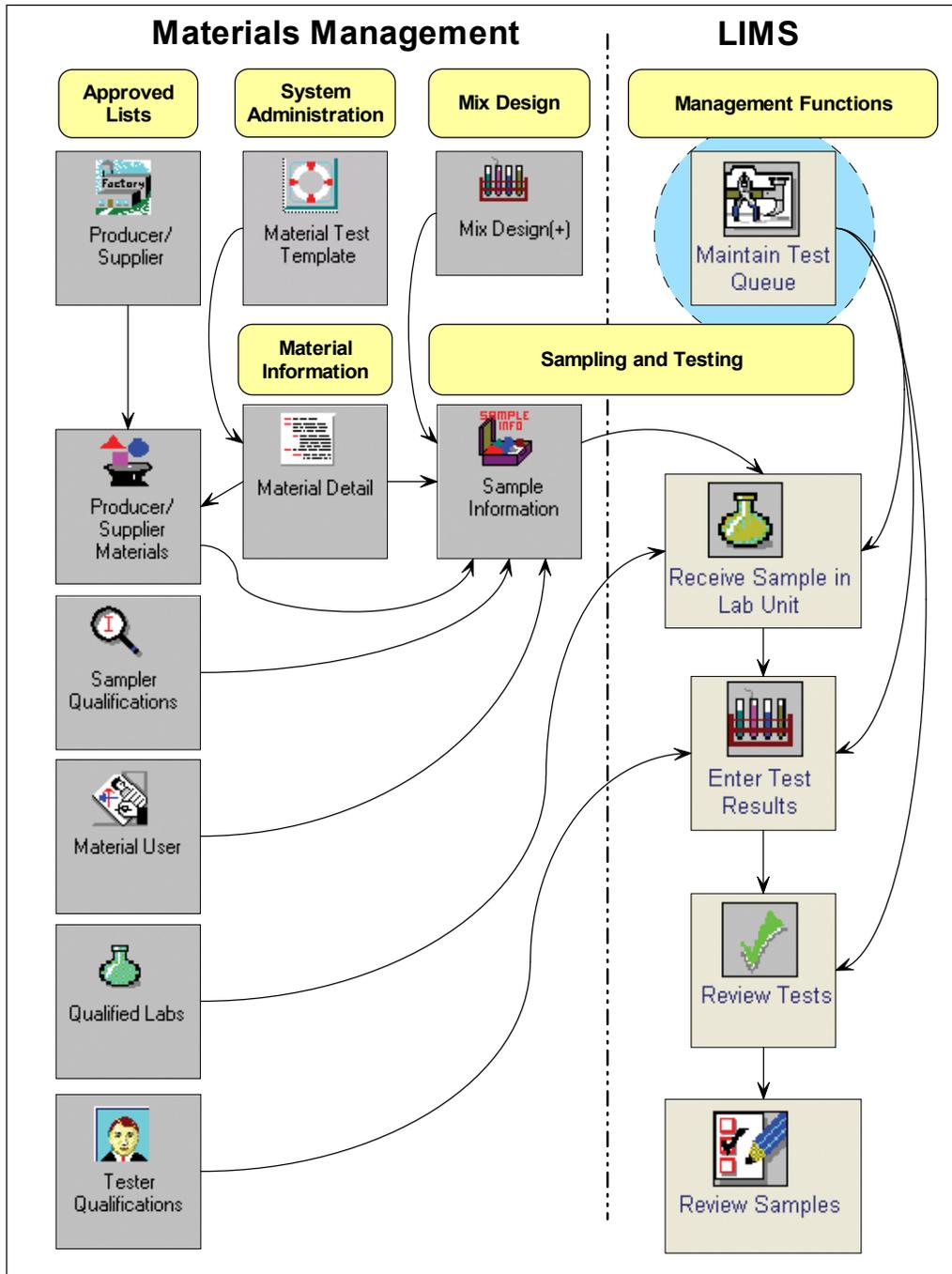


Figure 6-1.  General Workflow – Maintaining Test Queues – Detail

# Maintaining Test Queues

To monitor tests and test statuses as the tests move in the LIMS workflow, use the Maintain Test Queue window.

The Maintain Test Queue window displays all tests for samples from the time they have been received until all tests have been reviewed and completed.

The Maintain Test Queue window provides flexibility for monitoring tests:

- Add/cancel tests on samples.

- Assign due dates to tests.

- Assign priorities to tests.

- Appoint individual testers to tests.

- Assign tests to different lab units.

When you select a test, LIMS displays the Lab ID and Lab Name assigned to the test in the lower pane.
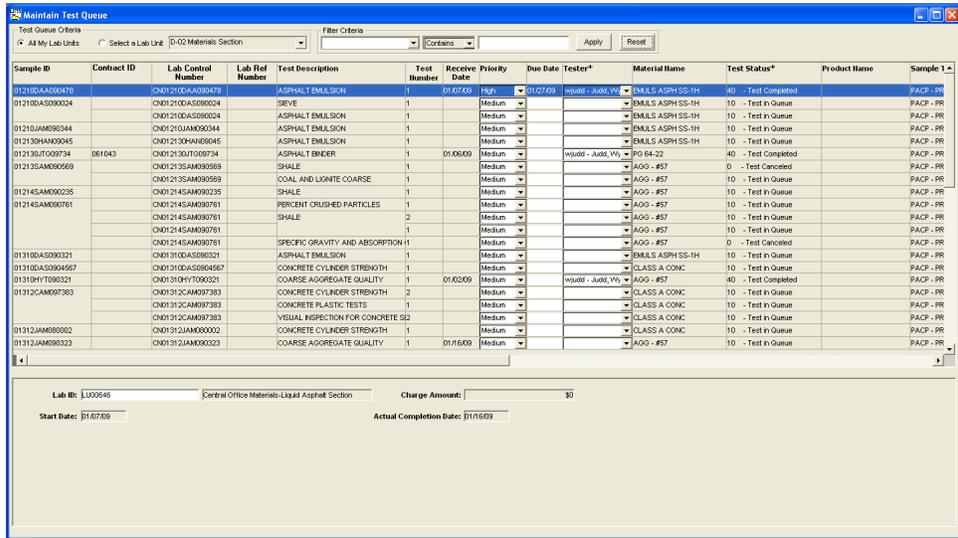


Figure 6-2.  SiteManager LIMS - Maintain Test Queue Window

| Field Name | Description |
| --- | --- |
| Test Queue Criteria | |
| All My Lab Units | Select to display available tests in queue for all lab units to which you belong. |
| Select a Lab Unit | Select to display available tests in queue for a particular lab unit to which you belong. |
| Filter Criteria | |
| Filter Criteria | Select criteria from the dropdown lists and enter text in the fields to limit the tests displayed on the window. |
| Apply | Click to activate filter criteria entered by the user. |
| Reset | Click to clear filter criteria. |
| Column Headings | |
| Sample ID | Identifies the sample. |
| Contract ID | List of all contracts assigned to the sample. |
| Lab Control Number | An umbrella number used to link samples. May use during sample review to process multiple samples at once. |
| Lab Reference Number | Simplified sample identifier used in the labs. |
| Seal Number | Seal number on the batch of the material tested. |
| Test Description | Describes the test method. |
| Test Number | Indicates run of the test on the sample. |
| Receive Date | Date the lab unit received the sample. |
| Priority | Assign priority to the test. Defaults to Medium. Optional. |
| Due Date | Assign date by which the tester should complete the test. |
| Tester * | User ID of the tester. |
| Material Name | Name assigned to the material in the sample. |
| Test Status * | Current status of the test. |
| Product Name | Brand name of the material in the sample. |
| Sample Type * | Indicates type of sample. |
| Lower Pane | |
| Lab ID | Change labs for tests only if a destination lab was improperly assigned to the sample. |
| Charge Amount | Per KYTC policy, this field will not be used. |
| Start Date | When the tester first entered test results. |
| Actual Completion Date | Tester populated with the actual date the test was completed. Required for authorization. |

| Field Name | Description |
|---|---|
| Toolbar Buttons | |
| Remarks | Enter/View remarks associated with the selected test. |
| Cancel Test | Cancel the selected test if it was improperly assigned to a sample. |
| Add Test | Add a new test or additional test runs to the selected sample. |

Table 6-1.  SiteManager LIMS – Maintain Test Queue Window – Fields

**Exercise 6-1**

In this exercise, learn how to access the Maintain Test Queue window.

User ID:  **dhines**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **DISTRICT MATERIALS ENGINEER (DME)**
Keys:  **All My Lab Units** (lab unit)

1. Start and log on to SiteManager LIMS as user **dhines**. LIMS displays the Navigation Panel window.

2. Double-click the **Maintain Test Queue** icon. LIMS displays the Maintain Test Queue window.

*You've accessed the Maintain Test Queue window.*

## Adding Tests to Samples

To add tests accidentally omitted when the sample was logged, click the Add Test button.

To add a test, select a sample on the Maintain Test Queue window. On the toolbar, click the Add Test button. The Add Tests window displays additional tests available to assign. Add one or more desired tests to the sample.

**Warning!** When adding multiple tests at one time, the Remarks window that LIMS automatically displays will apply remarks to the last selected test only.

Each newly assigned test has a test number of '1,' a test status of 'Test in Queue,' and a priority of 'Medium.' LIMS automatically populates the lab ID, lab name and charge amount.
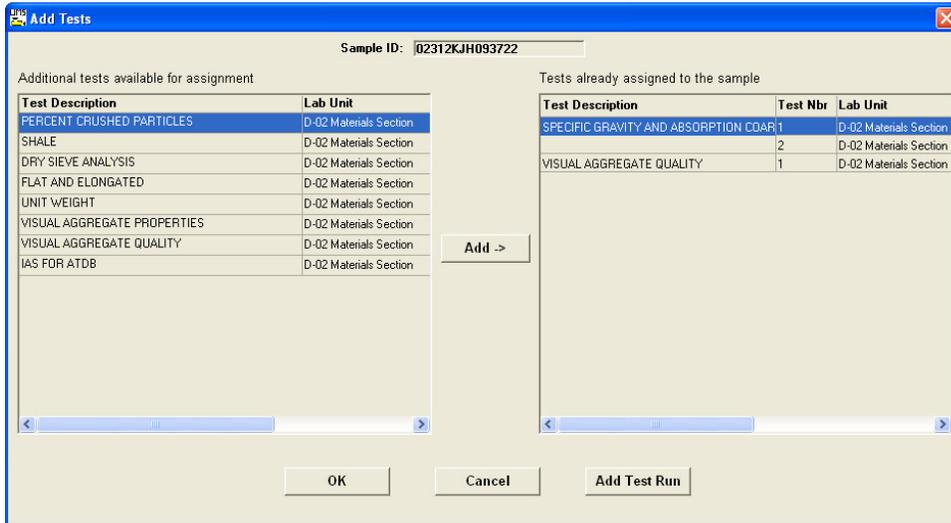


Figure 6-3.  SiteManager LIMS - Add Tests Window

## Canceling Tests

You cannot delete a test in LIMS, but you can cancel a test. To cancel a test, select a test on the window. On the toolbar, click the Cancel button. The system automatically displays the Remarks window. Enter a valid reason for canceling the test. A canceled test will only display in the Maintain Test Queue window.

The system changes the test status to Test Canceled. You cannot modify a canceled test other than to add remarks. If you try, the system will display a message to inform you that you cannot.

**Note:** If you cancel a test by mistake, you can re-add the test.

**Exercise 6-2**

In this exercise, learn how to add a test to a sample and cancel a test on a sample.

User ID: **dhines**      Password: **kentucky**      Connection: **Server**
Group Name: **DISTRICT MATERIALS ENGINEER (DME)**
Keys: **All My Lab Units** (lab unit)

1. In the first **Filter Criteria** dropdown list, select the **Sample ID** choice.

2. In the **Filter Criteria** text box, type **3722**.

3. Click the **Apply** button. LIMS selects the 02312KJH093722 sample record.

Now, let's cancel a test.

4. In the **Test Description** column, select the **VISUAL AGGREGATE QUALITY** test.

5. On the toolbar, click the **Cancel Test** button. LIMS displays the Remarks window.

6. In the **Internal Comments** field, type **WRONG TEST ASSIGNED. (DHINES -** < mm/dd/yy >**)**

7. To close the Remarks window, on the toolbar, click the **Remarks** button.

8. On the toolbar, click the **Save** button. LIMS changes the test status to 'Test Canceled.'

Now, let's add a test.

9. On the toolbar, click the **Add** button. LIMS displays the Add Tests window.

10. In the **Additional tests available for assignment** pane, select the **SPECIFIC GRAVITY AND ABSORPTION COARSE** test.

11. Click the **Add Test** button. LIMS displays the test in the 'Tests already assigned to the sample' pane.

12. In the **Tests already assigned to the sample** pane, in the **Test Description** column, select **SPECIFIC GRAVITY AND ABSORPTION COARSE**.

13. Click the **Add Test Run** button. LIMS displays the Select Additional Runs window.

14. In the **Select Additional Runs** dropdown list, to accept the default of **1**, click the **OK** button. LIMS displays the Add Tests window with two runs for that test.

15. Click the **OK** button. LIMS automatically displays the Remarks window.

Now, let's add remarks to the newly added test.

16. In the **Internal Comments** field, **FORGOT TO ADD TEST WHEN CREATING SAMPLE (DHINES -** < mm/dd/yy >**)**.

17. To close the Remarks window, on the toolbar, click the **Remarks** button.

18. On the toolbar, click the **Save** button.

*You've canceled a test and added a test with more than one run.*

## Assigning Priorities and Due Dates to Manage Test Completion Order

LIMS automatically assigns a Medium priority to tests, but does not assign a due date. To assign a different priority to a test, click the Priority dropdown list to select a High or Low choice. If necessary, assign a due date to the test.

**Important!** LIMS does not display warning messages if the tester fails to complete the test by the due date or according to the assigned priority.

**Exercise 6-3**

In this exercise, learn to assign a higher priority to a test and assign a due date.

User ID: **dhines**        Password: **kentucky**        Connection: **Server**
Group Name: **DISTRICT MATERIALS ENGINEER (DME)**
Keys: **All My Lab Units** (lab unit); **Sample ID Contains 3722** (filter)

1. In the **Filter Criteria** text box, type **8373**.

2. Click the **Apply** button. LIMS selects the 02312JJJ098373 sample record.

Now, let's change the priority.

3. For the **SPECIFIC GRAVITY AND ABSORPTION COARSE** test, in the **Priority** column's dropdown list, select the **High** choice.

Now, let's add a due date.

4. In the **Due Date** field, type a future date (mm/dd/yy format).

5. On the toolbar, click the **Save** button.

*You've changed the priority for and added a due date to a test.*

## Assigning Testers

An individual tester can be assigned to a test. Designating a tester does not make the test appear exclusively for that individual on the Enter Test Results window. Any qualified tester assigned to the appropriate lab unit will be able to view the test in Enter Test Results window.

**Note:** The Tester dropdown list is limited to *qualified* testers in the selected lab unit.

**Exercise 6-4**

In this exercise, learn how to assign a tester to a test.

User ID: **dhines**          Password: **kentucky**          Connection: **Server**
Group Name: **DISTRICT MATERIALS ENGINEER (DME)**
Keys: **02312JJJ098373** (sample ID);
      **SPECIFIC GRAVITY AND ABSORPTION COARSE** (test); **1** (run)

1.  In the **Tester** dropdown list, select **jdavis**.

2.  On the toolbar, click the **Save** button.

*You've assigned a tester to a test.*

## Assigning Tests to Different Lab Units

To choose a different lab unit than the one automatically allocated to a lab unit for the test during the creation of the sample, use the Lab ID field.

| Lab Id | Lab Name | Geographic Area | Lab Contact Person |
|--------|----------|-----------------|--------------------|
| LU00644 | Central Office Materials-Concrete/Cement Section | | |
| LU01210 | D-01 Materials Section | | |
| LU01300 | D-01 Paducah Section | | |
| LU01320 | D-01 Smithland Section | | |
| LU01340 | D-01 Mayfield Section | | |
| LU01360 | D-01 Murray Section | | |
| LU02210 | D-02 Materials Section | | |
| LU02300 | D-02 Madisonville Section | | |
| LU02320 | D-02 Henderson Section | | |
| LU02340 | D-02 Hopkinsville Section | | |
| LU02360 | D-02 Owensboro Section | | |
| LU03210 | D-03 Materials Section | | |
| LU03300 | D-03 Bowling Green Section | | |
| LU03320 | D-03 Glasgow Section | | |
| LU03340 | D-03 Russellville Section | | |

OK    Cancel

Figure 6-4.  SiteManager LIMS – Change Labs Window

**Exercise 6-5**

In this exercise, learn to assign a test to a different lab unit in the
Maintain Test Queue window.

User ID: **dhines**          Password: **kentucky**          Connection: **Server**
Group Name: **DISTRICT MATERIALS ENGINEER (DME)**
Keys: **All My Lab Units** (lab unit); **Sample ID Contains 8373** (filter)

1.  In the **Filter Criteria** text box, type **8761**.

2.  Click the **Apply** button. LIMS selects the 01314JUY098761
    sample record.

3.  In the **Test Description** column, select the **CONCRETE
    CYLINDER STRENGTH** test.

Now, let's select another lab to perform the test.

4.  In the lower pane, using your right-mouse button, click on the
    **Lab ID** field. LIMS displays a window containing a list of labs.

5.  To sort the list in alphabetic order according to lab ID, click
    the **Lab ID** column heading.

6.  In the **Lab ID** column, select **LU00644**.

7.  Click the **OK** button. LIMS closes the window.

8.  On the toolbar, click the **Save** button.

Now, let's add a remark.

9.  On the toolbar, click the **Remarks** button. LIMS displays
    the Remarks window.

10. In the **Internal Comments** field, type **DUE TO WORK
    LOAD, NOT ABLE TO COMPLETE BEFORE DUE
    DATE. (DHINES –** < mm/dd/yy >**)**

11. To close the Remarks window, on the toolbar, click the
    **Remarks** button again.

12. On the toolbar, click the **Save** button.

13. To clear the filter, click the **Reset** button.

*You've changed the lab assigned to perform a test.*

# Review

To display the Maintain Test Queue window:

1. On the Navigation Panel, double-click the **Maintain Test Queue** icon.

To add a test to a sample in the Maintain Test Queue window:

1. On the Maintain Test Queue window, select a sample.

2. Click the **Add** button.

3. In the Add Tests window, select a test from the **Additional Tests Available for Assignment** pane.

4. Click the **Add** button.

5. Click the **OK** button.

6. On the Remarks window, enter in a remark why the test was added.

To cancel a test on a sample in the Maintain Test Queue window:

1. On the Maintain Test Queue window, select a sample.

2. Click the **Cancel** button.

3. On the Remarks window, enter in a remark why the test was removed.

To add a tester to a sample in the Maintain Test Queue window:

3. On the Maintain Test Queue window, select a test.

4. In the **Tester** dropdown list, select the desired tester.

5. Click the **Save** button.

To add a priority to a test in the Maintain Test Queue window:

1. On the Maintain Test Queue window, select a test.

2. Click the **Priority** field.

3. Select a **Priority** in the priority drop down list.

4. Click the **Save** button.

To add a due date to a test in the Maintain Test Queue window:

1. On the Maintain Test Queue window, select a test.

2. In the **Due Date** field, type in the desired due date.

3. Click the **Save** button.

To assign a test to a different lab unit in the Maintain Test Queue window:

1. On the Maintain Test Queue window, select a test.

2. Right-click in the **Lab Unit** field to obtain a list of lab units.

3. In the **Lab ID** column, select the desired lab ID.

4. Click the **OK** button.

5. Click the **Save** button.

# Summary

In this exercise, demonstrate how to modify data in the Maintain Test Queue window.

User ID: **dhines**      Password: **kentucky**      Connection: **Server**
Group Name: **DISTRICT MATERIALS ENGINEER (DME)**
Keys: **All My Lab Units** (lab unit)

1. Create a filter to display only tests for the **01314YUM096271** sample record.

2. Add the **CONCRETE CYLINDER STRENGTH** test.

3. Add an appropriate remark.

4. Save.

5. Make the test **High** priority with a **due date of tomorrow**.

6. Assign **wjudd** as the tester.

7. Cancel the **CONCRETE CORES** test on **01314YUM096271** sample record.

8. Add an appropriate remark.

9. Reset the filter.

10. Exit SiteManager LIMS.

# 7. Reviewing Samples

In this chapter, you will receive instruction about the following:

# Understanding the General Workflow

The following diagram shows the general workflow between SiteManager software's Materials Management and LIMS components. The highlighted area denotes the functionality addressed in this chapter.



Figure 7-1. General Workflow - Reviewing Samples – Detail

# Accessing the Review Samples Window

To review samples, use the Review Samples window.
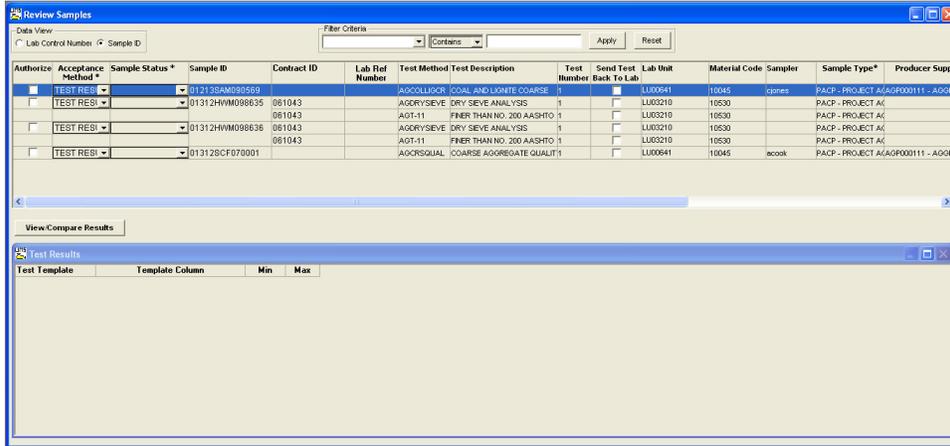


Figure 7-2.  SiteManager LIMS - Review Samples Window

| Field Name | Description |
|---|---|
| **Data View** | |
| Lab Control Number | Select to sort by Lab Control Number. |
| Sample ID | Select to sort by Sample ID. |
| **Filter Criteria** | |
| Filter Criteria | Select criteria from the dropdown lists and enter text in the fields to limit the samples displayed on the window. |
| Apply | Click to activate filter criteria entered by the user. |
| Reset | Click to clear filter criteria. |
| **Column Headings** | |
| Acceptance Method * | Populated with the method recorded on the SiteManager Maintain Sample Information window's Basic Sample Data panel. Verify that the correct acceptance method is displayed. |
| Sample Status * | Select the status of the sample.<br>▪ PENDING - Created a sample record and assigned tests. All test results may not be complete.<br>▪ COMPLETE - All sampling and/or testing criteria have been satisfied.<br>▪ FAILED - Sample did not meet material specification requirements. See detailed remarks.<br>▪ FAILED AND REMOVED FROM PROJECT - Sample did not meet material specification requirements. Sample will not count toward meeting Contract Sampling and Testing requirements. See detailed remarks.<br>▪ VOID - Logged a sample record incorrectly or revised.<br>▪ INVALID - Sample was inadvertently destroyed or contaminated. |
| Authorize | Select the Authorize check box and save. |
| Lab Control Number | An umbrella number used to link samples. May use during sample review to process multiple samples at once. |
| Lab Reference Number | Simplified sample identifier used in the labs. |
| Sample ID | Identifies the sample. |
| Contract ID | List of all contracts assigned to the sample. |
| Test Method | Method used to test material. |
| Test Description | Describes the test method. |
| Test Number | Indicates run of the test on the sample. |
| Send Test Back to Lab | Select the check box to send a test back to the lab for review (Review Tests window). |

| Field Name | Description |
|---|---|
| Lab ID | Lab unit where the test was performed. |
| Material Code | Identifies the material. |
| Sampler | User ID of the sampler. |
| Sample Type* | Indicates type of sample. |
| Producer Supplier* | Producer/supplier of the material in the sample. |
| Control Number | Actual number for the type of control to identify the sample. |
| Seal Number | Seal number on the batch of the material tested. |
| Completion Date | Date when the sample was marked as complete in the lab unit. |
| Manufacturer* | Manufacturer of the material in the sample. |
| Sample Date | Date the sampler took the sample. |
| Toolbar Buttons | |
| Remarks | Enter/View remarks associated with the selected sample. Enter appropriate remarks in the Remarks field. |

Table 7-1.  SiteManager LIMS – Review Samples Window (Upper Pane) – Fields

**Note:**  When defining criteria for a filter, the asterisk ( * ) that follows some of the field names denotes that the corresponding code must be used rather than the name.

 **Exercise 7-1**

In this exercise, learn how to access the Review Samples window.

User ID:  **jdavis**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **MATERIALS SECTION SUPERVISOR (DME)**
Keys:  **Sample ID** (data view)

1.  Start and log on to SiteManager LIMS as user **jdavis**. LIMS displays the Navigation Panel window.

2.  Double-click the **Review Samples** icon. LIMS displays the Review Samples window.

*You've accessed the Review Samples window.*

## Understanding the Review Samples Workflow

After the test reviewer marks all tests for a sample as *Review Completed*, LIMS displays the sample with all tests marked *Reportable* in the Review Samples queue for the appropriate sample reviewer. The sample reviewer accepts or rejects entries at the *sample level* after selecting an acceptance method and completion status for the *entire sample*.

If the results are not acceptable, the sample reviewer may select individual test(s) to send back to the lab for additional review. If a test is sent back to the lab, the system removes the entire sample record from the Review Samples queue.

## Understanding Product Review Groups

The system administrator assigns sample reviewers to Product Review Groups identified to review particular samples. Combinations of contract authority, material, sample type and destination lab determine the samples that appear in the queue for those sample reviewers.

## Understanding Data View Options

Sort the sample records in the Review Samples window in two ways: by control number or sample ID.

### Viewing Samples by Lab Control Number

If you select the Lab Control Number data view, LIMS groups the sample records together by the control number. When you group the sample records by lab control number they must be accepted or rejected at the lab control number level.

### Viewing Samples by Sample ID

If you select the Sample ID data view, LIMS hides the Control Number column.

# Viewing and Comparing Test Results

To access the test results associated to a sample, click the View/Compare Results button. Then, compare the same test method or different test methods across one sample or multiple samples.

In the upper pane, select a row and click the View/Compare Results button to display the test results for one test. Select multiple rows and click the View/Compare Results button to display the test results for the selected tests.
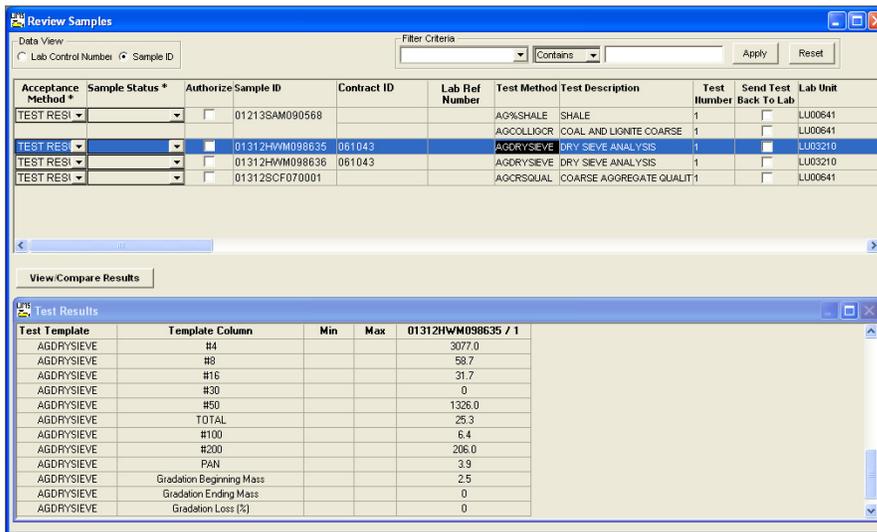


Figure 7-3. SiteManager LIMS - Review Samples Window - View/Compare Results - Single Sample

| Field Name | Description |
|---|---|
| View/Compare Results | Click to view a single test template's results or view multiple templates in a grid format at one time—even across samples. |
| Test Template | Test template for the compared tests. |
| Template Column | Labels used to describe the template layout and data entry fields to record the test results. LIMS changes the color of the columns to red where the test results do not meet the minimum or maximum standards. |
| Min | Minimum acceptable value for the spec template. |
| Max | Maximum acceptable value for the spec template. |
| Sample ID / Test Number | Combination of Sample ID and the sample test number selected for the grid view results comparison. |

Table 7-2. SiteManager LIMS - Review Samples Window (Lower Pane) – Fields

## Viewing Test Results for Single Samples

LIMS provides a means for you to view test results for a single sample.

**Exercise 7-2**

In this exercise, learn how to view results for a specific test.

User ID: **jdavis**          Password: **kentucky**          Connection: **Server**
Group Name:  **MATERIALS SECTION SUPERVISOR (DME)**
Keys:  **NA**

1. In the **Test Description** column, select the **DRY SIEVE ANALYSIS** test for sample **01312HWM098635**.

Now, let's view the test results on this test.

2. Click the **View/Compare Results** button. LIMS displays the results in a grid in the Test Results pane.

3. In the **Test Results** pane, on the title bar, click the **Maximize** button.

4. Review the test results.

5. In the **Test Results** pane, on the title bar, click the **Restore Down** button.

*You've viewed test results for a single test.*

## Viewing and Comparing Test Results for Multiple Samples

LIMS provides a means for you to view and compare test results across multiple samples.



Figure 7-4.  SiteManager LIMS - Review Samples Window - View/Compare Results - Multiple Samples

**Exercise 7-3**

In this exercise, learn how to view the test results across samples.

User ID: **jdavis**      Password: **kentucky**      Connection: **Server**
Group Name: **MATERIALS SECTION SUPERVISOR (DME)**
Keys: **NA**

1. On your keyboard, press and hold the **Ctrl** key.

2. In the **Test Description** column, click all **DRY SIEVE ANALYSIS** tests.

3. Release the **Ctrl** key.

Now, let's compare all test results.

4. Click the **View/Compare Results** button.

5. Note that the test for the **01312HWM098635** sample does not show a test template status.

*You've viewed test results for a single test on different samples.*

# Accepting Test Results and Indicating Sample Status

To prepare for finalization by signing off on the test results for an entire sample, select the desired choice from the Sample Status * dropdown list. Doing so does not remove the sample from the Review Samples queue, but serves to indicate that a test has been completed. KYTC has configured LIMS to auto-populate the Acceptance Method* dropdown list.

**Note:** Select the Sample Status* dropdown choice before selecting the Authorize check box.

When the sample has been finalized, upon selecting the Authorize checkbox and saving the record, LIMS displays the acceptance method in SiteManager's Maintain Sample Information window's Acceptance Method* field.
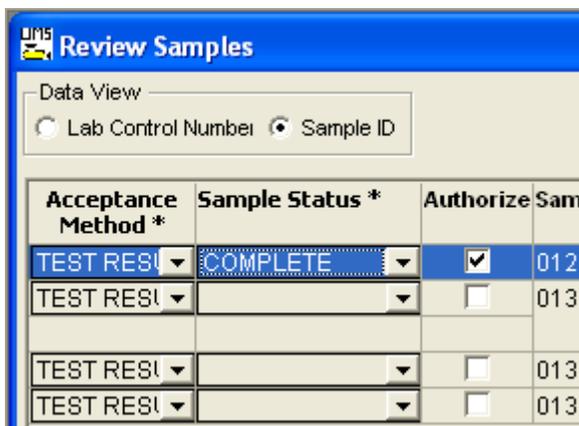


Figure 7-5.  SiteManager LIMS - Review Samples Window –
Acceptance Method* and Sample Status* Dropdown Lists – Detail

# Finalizing Samples

Before the sample will be removed from the Review Samples window, the user must complete the Sample Status* dropdown list and the Authorize check box.

**Note:** Select the Sample Status * dropdown choices before selecting the Authorize check box.

After the sample progresses from the Review Samples queue, the system updates the Maintain Sample Information window's fields. The system populates the Auth By field with the reviewer's user ID, populates the Auth Date with the current system date, and changes the sample status from *Pending Authorization* to *Complete*.

 **Exercise 7-4**

In this exercise, learn how to indicate sample status and authorize a sample.

User ID: **jdavis**         Password: **kentucky**         Connection: **Server**
Group Name: **MATERIALS SECTION SUPERVISOR (DME)**
Keys: **NA**

1. In the upper pane, in the **Test Description** column, select **DRY SIEVE ANALYSIS** for the **01312HWM098636** sample.

2. In the **Sample Status *** dropdown list, select the **COMPLETE** choice.

3. In the **Authorize** column, select the check box.

4. On the toolbar, click the **Save** button. LIMS removes the sample from the queue.

*You've indicated sample status and authorized a sample.*

# Sending Tests Back to the Lab

The sample reviewer selects individual test(s) to send back to the lab for further review. The system changes the status to *Back to Lab* and removes the sample record from the Review Samples queue and places the selected test in the Review Tests queue.



Figure 7-6.  SiteManager LIMS - Review Samples Window - Send Test Back to Lab – Detail
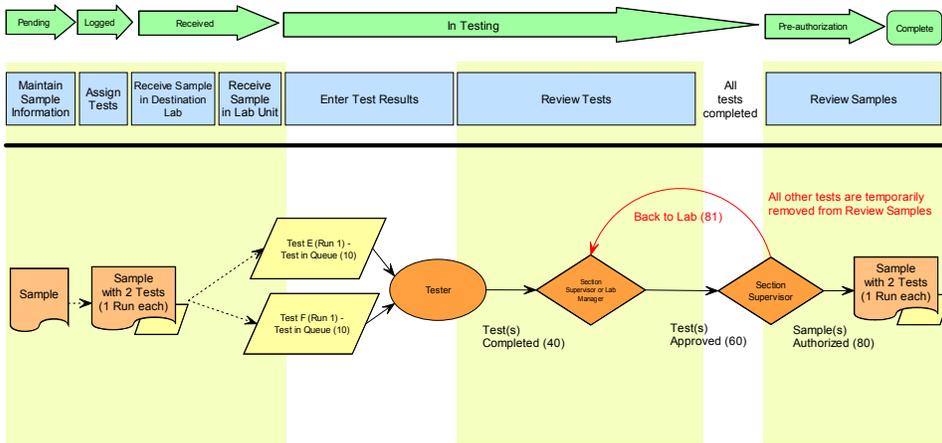


Figure 7-7.  Send Test Back to Lab Workflow

**Exercise 7-5**

In this exercise, learn how to send a test back to the lab.

User ID:  **jdavis**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **MATERIALS SECTION SUPERVISOR (DME)**
Keys:  **NA**

1. In the **Test Description** column, select **DRY SIEVE ANALYSIS** for the **01312HWM098635** sample.

Now, let's add a remark.

2. On the toolbar, click the **Remarks** button. LIMS displays the Remarks window.

3. In the **Remarks (General Remarks)** field, type **SENT BACK TO LAB TO ADD MISSING TEST STATUS. (JDAVIS –** < mm/dd/yy >**)**

4. To close the Remarks window, on the toolbar, click the **Remarks** button again.

Now, let's send the test back to the lab.

5. In the **Send Test Back to Lab** column, select the check box.

6. On the toolbar, click the **Save** button. LIMS removes the sample from the queue.

*You've sent a test back to the lab.*

# Review

To open the Review Samples window:

1.  On the Navigation Panel window, double-click the **Review Samples** icon.

To view samples by control number:

1.  On the Review Samples window, in the **Data View** area, click the **Control Number** button.

2.  Move the **Control Number** column between the **Completion Status** column and the **Sample ID** column.

To view samples by sample ID:

1.  On the Review Samples window, in the **Data View** area, click the **Sample ID** button.

To view test results:

1.  On the Review Samples window, in the upper pane, select a sample's test row.

2.  Click the **View/Compare Results** button.

To send a test back to the lab:

1.  On the Review Samples window, in the upper pane, select the **Send Test Back To Lab** check box.

2.  Click the **Save** button.

To finalize a sample:

1.  On the Review Samples window, in the upper pane, select a test row.

2.  In the **Acceptance\*** dropdown list, select the desired choice.

3.  In the **Completion Status\*** dropdown list, select the desired choice.

4.  In the **Finalize** column, select the checkbox.

5.  Click the **Save** button.

---

# Summary

In this exercise, review sample records and send a test back to the lab.

User ID: **jdavis**          Password: **kentucky**          Connection: **Server**
Group Name:  **MATERIALS SECTION SUPERVISOR (DME)**
Keys:  **NA**

1.  View the results for the **COARSE AGGREGATE QUALITY** test on the **01312SCF070001** sample.

2.  Change the sample status to **COMPLETE** and **authorize** the sample.

3.  Save.

4.  Send the **COAL AND LIGNITE COARSE** test for the **01213SAM090568** sample back to the lab. Add a remark that **all of the results are missing**.

5.  Save.

6.  Exit SiteManager LIMS.

# 8. Viewing Sample Information

In this chapter, you will receive instruction about the following:

# Opening View-Only Sample Records

Before displaying the View-Only Sample Information window, LIMS displays the Open Sample Records window where a user *must* specify criteria to search for samples. To find a specific sample record or groups of sample records based upon selected criteria, use the Open Sample Records window.



Figure 8-1.  SiteManager LIMS - Open Sample Records Window

| Field Name | Description |
|---|---|
| Filter | Dropdown list containing types of available filters (that is, Generic or user-specified). |
| New Filter | Click to create a new filter. |
| Delete Filter | Click to delete previously created filters. |
| Field | Name of the field in which the filter criteria is applied. |
| Operator | Equals, greater than, less than, begins with, and so on. |
| Value | User-specified text by which to filter in a field. |
| And/Or | Choose to combine criteria. |
| Add Criteria | Click to add another row of criteria for additional comparisons. |
| Delete Criteria | Click to remove the selected criterion. |
| Clear All | Click to remove all selected criteria. |
| Open Records | Click to invoke the search request. |
| Cancel | Click to close the Open Sample Records window without performing a search request. |

Table 8-1.  SiteManager LIMS - Open Sample Records Window – Fields

# Creating New Filters

To create a new filter, click the New Filter button, name it, select criteria, and click the Save Criteria button. You may create as many filters as you need, the system does not have a maximum limit.

**Note:** LIMS retains filter criteria until you clear the criteria.

 **Exercise 8-1**

In this exercise, learn how to create a new filter to display samples in the View-Only Sample Information window.

User ID: **jbowie**      Password: **kentucky**      Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **NA**

1. Start and log on to SiteManager LIMS as user **jbowie**.
   LIMS displays the Navigation Panel window.

2. Double-click the **View-Only Sample Information** icon.
   LIMS displays the Open Sample Records window.

3. Click the **New Filter** button. LIMS displays the 'Save New Filter As' window.

4. In the **Save New Filter As** field, type **SAMPLES IN MY LABS**.

5. Click the **OK** button.

6. Click the **Add Criteria** button.

7. In the **Field** dropdown list, select **Lab Unit**.

8. In the **Operator** dropdown list, select **Contains**.

9. In the **Value** field, type **LU03210**.

10. Click the **Open Records** button. LIMS displays the View-Only Sample Information window with the sample records that meet the criteria.

*You've created a new filter.*

# Understanding Sample Information Views

To verify information on a sample record, use the View-Only Sample Information window. The upper pane displays samples in the system. By selecting a row in the upper pane, the information in the lower pane changes for you to review sample details, contract details, other details, sample receive information, tests assigned, and test status for the selected row.
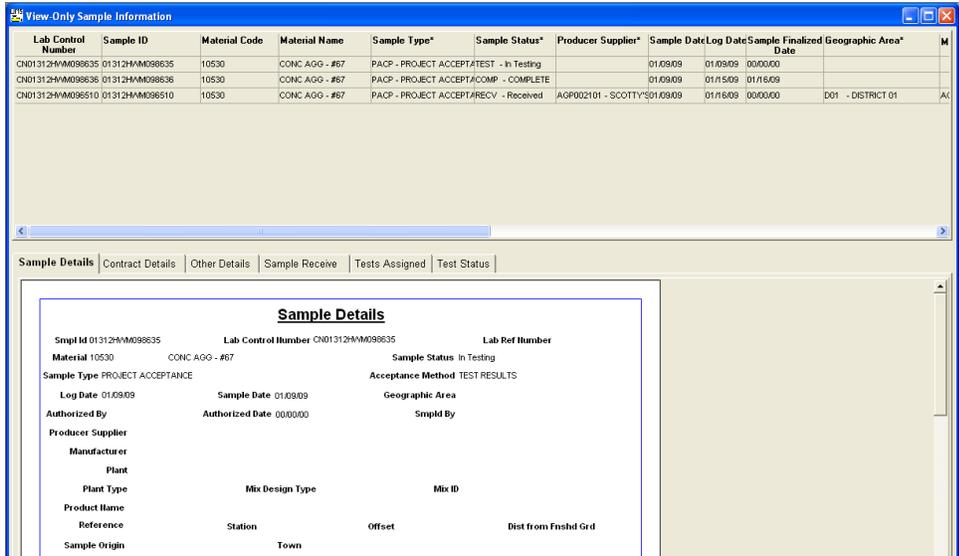


Figure 8-2.  SiteManager LIMS - View-Only Sample Information Window

# Understanding the Sample Details Panel

To display information about the sample, use the Sample Details panel. LIMS uses the data from SiteManager's Maintain Sample Information window's Basic Sample Data and Additional Sample Data panels.



Figure 8-3. SiteManager LIMS - View-Only Sample Information Window - Sample Details Panel

| Field Name | Description |
| --- | --- |
| Sample ID | Identifies the sample. Automatically populated by the system with the value that appears on the Basic Sample Data panel. |
| Lab Control Number | An umbrella number used to link samples. May use during sample review to process multiple samples at once. |
| Lab Ref Number | Lab Reference Number. Simplified sample identifier used in the labs. |
| Material | Identifies the material. |
| Sample Status | Identifies the current status of this record. |
| Sample Type | Indicates type of sample. |
| Smpld By | User ID of the person who took the sample. |
| Sample Date | Date the sampler actually took the sample. |
| Log Date | Date the sample was logged in the system. |
| Geographic Area | District where the sampler took the sample. |
| Authorized By | Auto-populated with the ID of the user who authorized the sample record. |
| Authorized Date | Auto-populated. Date the user authorized the sample. |
| Acceptance Method | Method by which the sample is being accepted. |
| Producer Supplier | Approved producer/supplier for the sampled material. |
| Manufacturer | Manufacturer of the sampled material. |
| Plant | Per KYTC policy, do not use this field. |
| Plant Type | Per KYTC policy, do not use this field. |
| Mix Design Type | Type of sampled mix design. |
| Mix ID | Identifies mix associated with the sample. |
| Product Name | Brand of the sampled material. |
| Reference | Location referenced on the plans where the sampler took the sample. Optional. |
| Station | Station where the sampler took the sample. Required for concrete cylinders, soils, aggregate base, and cores. |
| Offset | Offset from the station. Required for concrete pavement cylinders (indicate left or right from centerline) and aggregate base and soils and cores (indicate distance left or right from centerline). |
| Dist from Fnshd Grd | Distance from Finished Grade. Per KYTC policy, do not use this field. Captured in Material Test Templates. |
| Sample Origin | Description of where the sample originated. Optional. |
| Town | Town where the sampler took the sample. Optional. |
| Sampled From | From where the sampler took the sample. Required for concrete cylinders structure location. Other locations, as needed. |
| Requested By | Person who requested the sample. Optional. |

| Field Name | Description |
|---|---|
| Intended Use | Intended use of the material. |
| Buy USA | Indicates if the material sampled fulfills the requirement for the Buy USA program. Selected if based on contract specifications. |
| Witnessed By | ID of the witness to the sampler that took the sample. Optional, except when KYTC witnesses IAS, Liquid Asphalt, and QC samples. |
| Control Nbr | Control Number. Populated when a control type is selected. |
| Represented Qty | Represented Quantity. Per KYTC policy, do not use this field. |
| Seal Nbr | Seal number on the batch of the material tested. |
| Sample Size | Indicates the sample size, particularly for samples that have more than one unit (for example, 2 cans). Optional. |
| Linked Sample ID | Other sample IDs that reference this sample for the following reasons:<br>▪ QC samples linked to the corresponding QA sample for the material.<br>▪ IAS samples linked to an Acceptance sample.<br>▪ When additional testing must be performed for failing samples, the new sample should be linked to the failing sample. |
| Revised from Sample ID | Auto-populated on the *original* sample record with the user ID of the person who revised the sample record. Only relevant when a sample record is revised. Not populated on the *revised* sample record. |

Table 8-2.  SiteManager LIMS - View-Only Sample Information Window - Sample Details Panel – Fields

## Understanding Remarks on the Sample Details Panel

LIMS displays remarks recorded on the sample record in SiteManager's Maintain Sample Information, Receive Sample in Lab Unit, and Review Samples windows.

**Exercise 8-2**

In this exercise, learn how to modify an existing filter and view the information displayed in the lower pane of the View-Only Sample Information window.

User ID:  **jbowie**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **Samples in My Labs** (filter)

1. On the toolbar, click the **Open** button. LIMS displays the Open Sample Records window.

2. In the **Filter** dropdown list, select the **Sample ID** choice.

3. In the **Value** field, type **6510**.

4. Click the **Open Records** button. LIMS displays the row for the 01312HWM096510 sample.

5. In the lower pane, view the **Sample Details** panel.

*You've modified a filter and viewed the Sample Details panel.*

# Understanding the Contract Details Panel

To display information about the associated contract, use the Contract Details panel. LIMS uses the data from SiteManager's Maintain Sample Information window's Contract panel.



Figure 8-4. SiteManager LIMS - View-Only Sample Information Window - Contract Details Panel

| Field Name | Description |
|---|---|
| Contract ID | Identifies the contract associated with the item for Project Acceptance samples. |
| Project Nbr | Project Number. Identifies the project associated with the sample. |
| Line Item Nbr | Line Item Number. Identifies the proposal line number associated with the item. |
| Item Code | Uniquely identifies the item on the contract. **Usage:** Customized by KYTC. |
| Line Item Desc | Line Item Description. Describes the item on the contract. **Usage:** Customized by KYTC. |
| Represented Qty | Represented quantity of the sampled material. Optional. |

Table 8-3. SiteManager LIMS - View-Only Sample Information Window - Contract Details Panel – Fields

## Understanding Remarks on the Contract Details Panel

LIMS displays the same remarks available from the Sample Details panel.

**Exercise 8-3**

In this exercise, learn how to view the Contract Details panel.

User ID:  **jbowie**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **01312HWM096510** (sample ID)

> 1.  Click the **Contract Details** tab. LIMS displays the
>     **Contract Details** panel.

*You've viewed the Contract Details panel.*

# Understanding the Other Details Panel

To view information about the destination lab, the user ID of the user who last modified the sample, and the date the user last modified the sample, use the Other Details panel. LIMS uses the data from the Maintain Sample Information window's Other panel.



Figure 8-5. SiteManager LIMS - View-Only Sample Information Window - Other Details Panel

| Field Name | Description |
|---|---|
| Other Type | Agency-defined fields for tracking information not found elsewhere on the sample record. Also includes a system-defined field, Destination Lab, for assigning the lab unit that will process the sample using LIMS. |
| Other Information | Displays value entered for the selected choice in the Other Type column. |

Table 8-4. SiteManager LIMS - View-Only Sample Information Window - Other Details Panel – Fields

## Understanding Remarks on the Other Details Panel

LIMS displays the same remarks available from the Sample Details panel.



**Exercise 8-4**

In this exercise, learn how to view the Other Details panel.

User ID: **jbowie**      Password: **kentucky**      Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **01312HWM096510** (sample ID)

1. Click the **Other Details** tab. LIMS displays the **Other Details** panel.

*You've viewed the Other Details panel.*

# Understanding the Sample Receive Panel

To display information about the destination lab and lab unit receiving the sample, use the Sample Receive panel.



Figure 8-6. SiteManager LIMS - View-Only Sample Information Window - Sample Receive Panel

| Field Name | Description |
|---|---|
| Dest Receive Date | Destination Receive Date. Date the destination lab received the sample. Bypassed for all samples. Per KYTC policy, this field will be blank. |
| Receiving Destination | Name of the destination lab that received the sample. Bypassed for all samples. Per KYTC policy, this field will be blank. |
| Lab Unit Receive Date | Date the lab unit received the sample. |
| Receiving Lab Unit | Name of the lab unit that received the sample. |

Table 8-5. SiteManager LIMS - View-Only Sample Information Window - Sample Receive Panel – Fields

## Understanding Remarks on the Sample Receive Panel

LIMS displays the same remarks available from the Sample Details panel.



**Exercise 8-5**

In this exercise, learn how to display information on the Sample Receive panel.

User ID:  **jbowie**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys:  **01312HWM096510** (sample ID)

1. Click the **Sample Receive** tab. LIMS displays the **Sample Receive** panel.

*You've viewed the Sample Receive panel.*

# Understanding the Tests Assigned Panel

To display information about the tests assigned to the sample, use the Tests Assigned panel.



Figure 8-7. SiteManager LIMS - View-Only Sample Information Window - Tests Assigned Panel

| Field Name | Description |
|---|---|
| Test Meth | Test Method. Method used to test material. |
| Test Description | Describes the test method. |
| Smpl Tst Nbr | Sample Test Number. Indicates run of the test on the sample. |

Table 8-6. SiteManager LIMS - View-Only Sample Information Window - Tests Assigned Panel – Fields

## Understanding Remarks on the Tests Assigned Panel

LIMS displays any public remarks entered in Enter Test Results, Maintain Test Queue or Review Tests windows.



**Exercise 8-6**

In this exercise, learn how to use the information on the Tests Assigned panel.

User ID: **jbowie**       Password: **kentucky**       Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **01312HWM096510** (sample ID)

1. Click the **Tests Assigned** tab. LIMS displays the **Tests Assigned** panel.

*You've viewed the Tests Assigned panel.*

# Understanding the Test Status Panel

To display information about the status of the various tests assigned to a sample, use the Test Status panel.



Figure 8-8.  SiteManager LIMS - View-Only Sample Information Window - Test Status Panel

| Field Name | Description |
|---|---|
| Test Meth | Test Method. Method used to test material. |
| Test Description | Describes the test method. |
| Smpl Tst Nbr | Sample Test Number. Indicates run of the test on the sample. |
| Test Status | Current status of the test. |
| Priority | Priority assigned to the test by the supervisor. |
| Due Dt | Due Date. Assigned to the test by the supervisor. |
| Reportable | Indicates whether the test is reportable. Do not clear. |
| Test Result Val | Test Result Value. Final test result value for the template |
| Tester ID | Tester assigned by the supervisor to perform or oversee the test. Optional. |
| Lab Unit | Indicates where the test will be performed. |
| Chrg Amt | Charge Amount. Cost of the test. |
| Start Dt | Start Date. When the tester first entered test results. |
| Actl Complt Dt | Actual Completion Date. Date when the test was marked as complete. |

Table 8-7.  SiteManager LIMS - View-Only Sample Information Window - Test Status Panel – Fields

## Understanding Remarks on the Test Status Panel

LIMS displays any public remarks and internal lab remarks entered in Enter Test Results, Review Tests, and Maintain Test Queue windows.

**Exercise 8-7**

In this exercise, learn how to use the information on the Test Status panel.

User ID: **jbowie**     Password: **kentucky**     Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **01312HWM096510** (sample ID)

1. Click the **Test Status** tab. LIMS displays the **Test Status** panel.

*You've viewed the Test Status panel.*

# Understanding the Test Results Panel

To display information about the results of the various tests assigned to a sample, use the Test Results panel.

**Usage:** Customized for KYTC. Test Results panel will appear in the production version of the software.

## Using Generic Filter Criteria

The Filter dropdown list contains a default filter named Generic. To create search criteria for samples, use the generic filter. The Generic filter retains the filter criteria defined in the Open Sample Records window until you clear the filter.

**Tip!**  Create filters for frequently used search criteria.

## Deleting Filters

To delete a filter from the Open Sample Records window, select a Filter Name in the Filter dropdown list and click the Delete Filter button.

## Creating Multi-Criteria Filters

To further refine a filter search, use the multi-criteria feature. To select samples by two or more criteria, use the Open Sample Records window.



Figure 8-9.  SiteManager LIMS - Open Sample Records Window (Multi-Criteria)

**Exercise 8-8**

In this exercise, learn how to filter samples based on multiple criteria.

User ID: **jbowie**　　　　Password: **kentucky**　　　　Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **NA**

1. On the toolbar, click the **Open** button. LIMS displays the Open Sample Records window.

2. Click the **New Filter** button. LIMS displays the Save New Filter As window.

3. In the **Save New Filter As** field, type **CONTRACT / MATERIALS**.

4. Click the **Add Criteria** button.

5. In the **Field** dropdown list, select **Contract ID**.

6. In the **Operator** dropdown list, select **Equals**.

7. In the **Value** field, type **061043**.

Now, let's add more criteria.

8. Click the **Add Criteria** button.

9. In the **And/Or** dropdown list, verify that the **And** choice is selected by default.

10. In the **Field** dropdown list, select **Material Code**.

11. In the **Operator** dropdown list, select **Equals**.

12. In the **Value** field, type **40905**.

13. Click the **Open Records** button.

Now, let's view a record.

14. In the **Sample ID** column, select **01210GAH090045**.

15. View the details in the lower pane.

*You've created a multiple-criteria filter.*

---

# Review

To open the View-Only Sample Information window:

1. On the **Navigation Panel**, double-click the **View-Only Sample Information** icon.

To open the Open Sample Records window:

1. On the View-Only Sample Information window's toolbar, click the **Open** button.

To create a new filter:

1. On the **Navigation Panel**, double-click the **View-Only Sample Information** icon.

2. In the **Filter** dropdown list, select the **Generic** choice.

3. Click the **Add Criteria** button.

4. In the **Field** dropdown list, select the desired choice.

5. In the **Operator** dropdown list, select the desired choice.

6. In the **Value** field, type the desired text**.**

7. Click the **Open Records** button.

To create a multi-criteria filter:

1. On the Open Sample Records window, in the **Filter** dropdown list, select the **Generic** choice.

2. Click the **Add Criteria** button.

3. In the **Field** dropdown list, select the desired choice.

4. In the **Operator** dropdown list, select the desired choice.

5. In the **Value** field, type the desired text**.**

6. Click the **Add Criteria** button again.

7. In the **And/Or** dropdown list, select the desired choice.

8. In the **Field** dropdown list, select the desired choice.

9. In the **Operator** dropdown list, select the desired choice.

10. In the **Value** field, type the desired text.

11. Click the **Open Records** button.

To clear all criteria:

1. On the Open Sample Records window, in the **Filter** dropdown list, select the desired choice.

2. Click the **Clear All** button.

3. Click the **Open Records** button.

To delete a filter:

1. On the Open Sample Records window, in the **Filter** dropdown list, select the desired choice.

2. Click the **Delete Filter** button.

To view Sample Details, Contract Details, Other Details, Sample Receive, Tests Assigned, or Test Status panels:

1. On the View-Only Sample Information window, in the upper pane, select the desired sample record.

2. In the lower pane, click the desired tab.

# Summary

In this exercise, enter criteria to filter samples.

User ID: **jbowie**       Password: **kentucky**      Connection: **Server**
Group Name: **CENTRAL MATERIALS LAB TECHNICIANS (CMLT)**
Keys: **01210GAH090045** (sample ID)

1. Create a filter to locate the samples where **Abe Lincoln** was the **sampler**.

2. Create another filter to locate all samples where the **material name** pertains to **asphalt**.

3. Why was a retest ordered for sample **01312SHJ090004**?

   _____

4. Exit SiteManager LIMS.

# 9. Creating Sample Records from Daily Work Reports

In this chapter, you will receive instruction about the following:

# Selecting an Item for the Sample

To make use of the material information recorded on a DWR, create a sample record directly from the DWR.

On the Work Items panel, select the item for which you need to create a sample record.



Figure 9-1.  Daily Work Reports Window - Work Items Panel (Record Work Item View)

**Exercise 9-1**

In this exercise, access the Daily Works Reports window and select the contract, DWR, and item.

User ID:  **cgayle**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **Inspector (INSP)**
Keys:  **N/A**

1.  Start and **log** on to SiteManager as **cgayle**.

2.  On the **Main Panel** panel, double-click the **Daily Work Reports** icon.

3.  On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon. SiteManager displays the Daily Work Reports window.

4.  On the toolbar, click the **Open** button. SiteManager displays the Contract ID window.

5.  In the **Contract ID** area, double-click **061043**. SiteManager displays the **Inspector** area.

6.  In the **Inspector Name** column, double-click **cgayle - Gayle, Crystal**. SiteManager displays the **Date** area.

7.  In the **DWR Date** column, double-click **01/13/09.** SiteManager displays the DWR for that date.

8.  On the Daily Work Reports window, click the **Work Items** tab. SiteManager displays the list of available contract items.

9.  In the **Instld** column, double-click the row with the selected check box. – **Project Number DE06300750643, Line Item Number 0690, Item Code 08100 – CONCRETE-CLASS A**. SiteManager displays the **Work Item** panel's Record Work Item view.

*You've accessed the Daily Works Reports window and selected the contract, DWR, and item.*

# Viewing Material Inspection Details

The Material Inspection Detail window is accessible from the Record Work Item folder tab displaying daily usage records for a selected work item.  The Material Inspection Detail window can be accessed from the Services menu option or from the Open Material Inspection Detail icon located on the toolbar.  The Material Inspection Detail window is only accessible from the Record Work Item window.

The Material Inspection Detail window has the following panels:
- Contract Item Info
- Associated Materials
- Sampling & Testing Requirements

The Material Inspection Detail window will display contract item information from the DWR Record Work Item folder tab in the top panel. The middle panel will display all contract materials associated with the item code.  If the material has Contract Sampling and Testing Requirements defined, the Contract S&T column will be checked. If samples were previously created for the selected material from the DWR window, the DWR Sample field will be checked. Users can select a material by clicking on a Material Component, displaying associated Test Methods in the lower (third) panel.

The third panel will display contract sampling and testing requirement information for the selected material in the middle panel. If contract sampling and testing requirements have not been defined for the material, this panel will be blank. The data displayed in this panel is information only and no data from this panel is carried over to the sample window to create samples.

Figure 9-2. Material Inspection Detail Window

| Field Name | Description |
|---|---|
| **Key Information** | |
| Contract ID | ID for the contract. |
| Inspector | Creator of the DWR. |
| DWR Date | Date the DWR was created. |
| **Recorded Work Information** | |
| Project Nbr | Project Number. |
| Line Itm Nbr | Line Item Number. Contract line item number of the item. |
| Item Code | ID for the item. |
| Category Nbr | Category Number. Category of the item. |
| Item Desc | Item Description. Short description of the work item. |
| Unit Price | Cost per unit of measure. |
| Supp Desc 1 | Supplemental Description 1. |
| Supp Desc 2 | Supplemental Description 2. |
| Qty Reported to Date | Quantity Reported to Date. Total of all reported quantities on DWRs, whether authorized or unauthorized and regardless of inclusion on an estimate. |
| Qty Authorized to Date | Quantity Authorized to Date. Total of all reported quantities on authorized DWRs. |
| Units Type | Price per unit of item. |
| Qty Installed to Date | Quantity Installed to Date. Total of all authorized reported quantities on DWRS included in an estimate of any status. Will always equal the Qty Paid to Date value, unless adjusted on the Estimate Item Detail window. |
| Bid Qty | Bid Quantity. Original amount bid for an item. |
| Pay to Plan Qty | Pay to Plan Quantity. Indicates if line item is paid to plan quantity. No overruns allowed. |
| Status | Item status (active, closed) |
| Qty Paid to Date | Quantity Paid to Date. Total quantity reported on DWRs that were authorized in diaries and included in an estimate of any status. |
| Current Contract Qty | Current Contract Quantity. Current contract quantity of the contract line item including any change orders. Calculated by the sum of bid quantity and the net change order quantity. |
| **Material Inspection Detail Information** | |
| Material Component | Short material description. |
| Cont Est Matrl Qty | Contract Estimated Material Quantity. Current quantity of contract items multiplied by the conversion factor. |
| Satisf Repr Matrl Qty | Satisfied Represented Material Quantity. Total material quantity reported on the Contract panel of the Maintain Sample Information window. |

| Field Name | Description |
|---|---|
| Reprt Matrl Qty | Reported Material Quantity. Total material installed is calculated based on installed quantity of contract item multiplied by the conversion factor. |
| Matrl Unit | Material Unit. Item material unit. |
| Conversion Factor | Used by the required samples calculation to convert current quantity to required quantity. |
| Contract S&T | Contract Sampling and Testing. Indicates item has contract sampling and testing requirements defined. |
| DWR Sample | Indicates sample was created from DWR. |
| Contract Sampling and Testing Requirements Information | |
| Test Method | Unique ID to identify the method used for testing the material. |
| Sampling Rate | Rate at which a sample must be collected. |
| Sampling Frequency | Frequency at which a sample must be collected. |
| Acceptance Method | Identifies how the material will be accepted on the contract. |
| Sample Type | Identifies the type of the test being performed. |
| P/S Code | Producer/Supplier Code. Unique ID for the producer/supplier. |
| P/S Name | Producer/Supplier Name. Name of the producer/supplier. |

Table 9-1.  Material Inspection Detail Window – Fields

**Exercise 9-2**

In this exercise, learn to view material inspection details.

User ID: **cgayle**     Password: **kentucky**     Connection: **Server**
Group Name: **Inspector (INSP)**
Keys: **N/A**

1.  On the toolbar, click the **Open Material Inspection Detail
    Window** button. SiteManager displays the Material
    Inspection Detail window.

2.  In the middle pane (the **Material Component)** select
    **CEMENT TYPE 1.** In the lower pane, SiteManager
    displays the test methods associated with the selected
    material.

*You've viewed material inspection details.*

# Creating the Sample Record

Create Sample for Selected Material

From the Material Inspection Detail window, the user can click on the Services, Create Sample menu option or the tool bar icon. SiteManager will open the Maintain Sample Information window for the selected material. Fields in the Maintain Sample Information window will be populated from information available in the Material Inspection Detail window.

The user can view information in the Maintain Sample Information window by clicking on the Services, Open Sample window menu option or the tool bar icon. If more than one sample was created for the DWRs material a window will be populated listing all the samples created for the material. Users can pick a sample and click OK to open the selected sample.

**Exercise 9-3**

In this exercise, create a sample record that uses the information already entered for the material.

User ID: **cgayle**  Password: **kentucky**  Connection: **Server**
Group Name: **Inspector (INSP)**
Keys: **N/A**

1. On Material Inspection Detail window's toolbar, click the **Create Sample for Selected Material** button. SiteManager displays the Maintain Sample Information window with pre-populated information about the material.

---

## Recording Basic Sample Data

Maintain Sample Information window is opened with the Material field populated.  The user will populate the remaining appropriate fields.



Figure 9-3.  Maintain Sample Information Window - Basic Sample Data Panel

**Exercise 9-4**

In this exercise, add to the sample record you created from the item on the DWR.

User ID: **cgayle**          Password: **kentucky**          Connection: **Server**
Group Name: **Inspector (INSP)**
Keys: **N/A**

1. In the Sample ID field, enter a valid ID in the following format:

   DDSSSIIIYY####.

   Remember, DD – use your District number.  SSS – use your Section number.  III –Use your initials ALL UPPERCASE.  YY – Use the current year.  #### - Start each year with the sequence number 0001.

2. In the **Smpl Type** dropdown list, select the **Project Acceptance** choice.

3. In the **Acpt Meth** dropdown list, select the **Test Results** choice.

4. Using the right mouse button, click on the **Sampler** field.

5. On the object menu, select the **Search** choice. SiteManager displays the Search Window.

6. In the **Sampled By** column, double-click **jbowie - Bowie, James.** SiteManager displays the sampler in the Maintain Sample Information window.

7. Using the right mouse button, click on the **P/S** field.

8. On the object menu, select the **Search** choice. SiteManager displays the Search Window.

9. In the **Producer Supplier Name** column, double-click **COP070021 – CEMEX@LOUISVILLE.** SiteManager displays the sampler in the Maintain Sample Information window.

10. In the **Geog Area** dropdown list, select the **District 05**.

11. On the toolbar, click the **Save** button.

## Record Additional Sample Data



Figure 9-4.  Maintain Sample Information Window - Addtl Sample Data Panel



### Exercise 9-5

In this exercise, learn how to record additional sample data.

User ID:  **cgayle**          Password:  **kentucky**          Connection:  **Server**
Group Name:  **Inspector (INSP)**
Keys:  **N/A**

1.  Click the **Addtl Sample Data** tab. SiteManager displays the **Addtl Sample Data** panel.

2.  In the **Control Type** dropdown list, select **LOT NUMBER**.

3.  In the **Cntrl Number**, enter **LT1238**.

4.  On the toolbar, click the **Save** button.

*You've recorded additional sample data.*

## Recording Contract Sample Data

To associate sample details and test results for a material to specific contracts and contract items, use the Contract panel.

Since the sample record was generated from a DWR, the contract item is automatically associated to the same contract as the DWR.



Figure 9-5.  Maintain Sample Information Window - Contract Panel



**Exercise 9-6**

In this exercise, learn to record represented quantity information for the contract.

User ID:  **cgayle**           Password:  **kentucky**           Connection:  **Server**
Group Name:  **Inspector (INSP)**
Keys:  **N/A**

    1.  Click the **Contract** tab. SiteManager displays the **Contract** panel.

        Note:  The Sample is associated with the DWR contract.

*You've recorded the represented quantity for the contract.*

# Recording Other Sample Data



Figure 9-6.  Maintain Sample Information Window - Other Panel
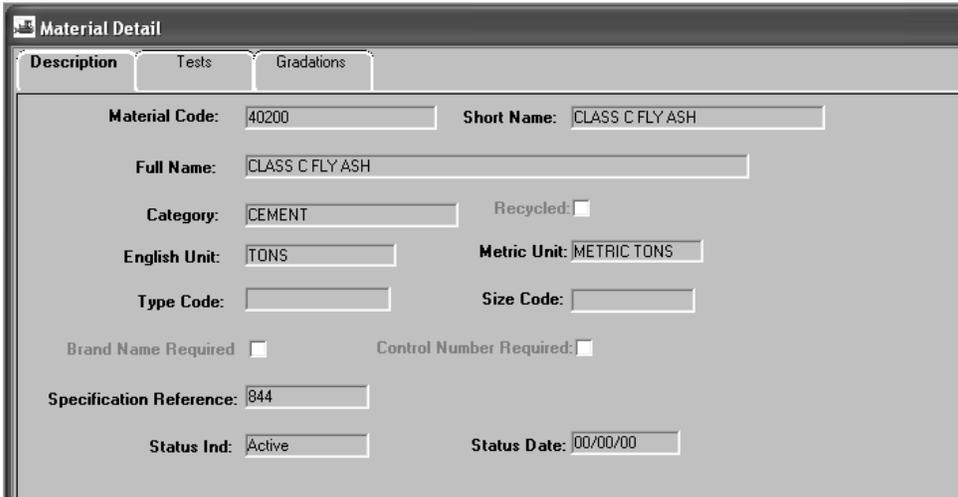
 **Exercise 9-7**

In this exercise, record the destination lab and any other information.

User ID: **cgayle**          Password: **kentucky**          Connection: **Server**
Group Name: **Inspector (INSP)**
Keys: **N/A**

1. Click the **Other** tab.

2. In the **Type** dropdown list, select the **Destination Lab** choice.

3. Using the right mouse button, click on the **ID** field.

4. On the object menu, select the **Search** choice. SiteManager displays the Search Window.

5. In the **Destination Lab** column, double-click **Central Office Materials**.

6. On the toolbar, click the **Save** button.

7. On the toolbar, click the **Close** button.

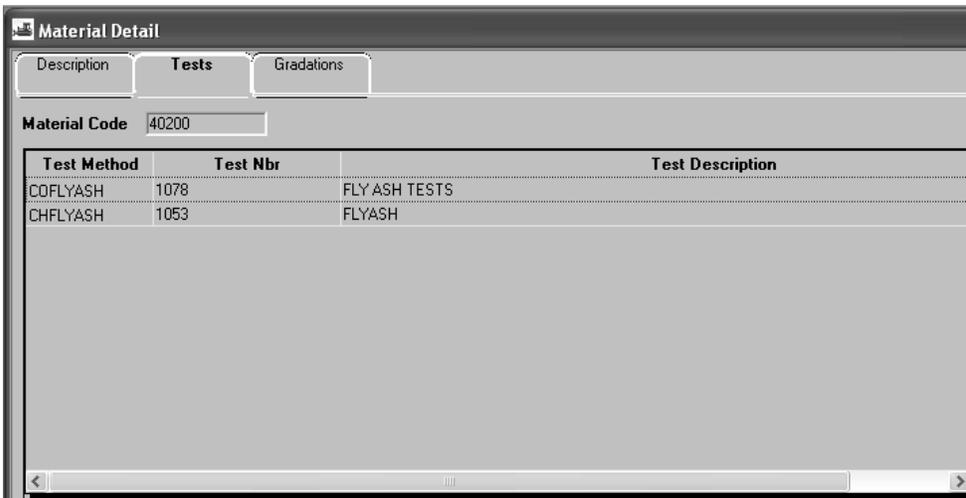## Viewing Material Details from the Material Inspection Detail Window

From the Material Inspection Detail window, click the View Material button to view inquiry-only information about the selected material in the Material Detail window. This is the same window that was reviewed in the Material Information section.



Figure 9-7. Material Detail Window - Description Panel



Figure 9-8. Material Detail Window - Tests Panel

**Exercise 9-8**

In this exercise, learn to access the Material Detail window.

User ID: **cgayle**　　　　Password: **kentucky**　　　　Connection: **Server**
Group Name: **Inspector (INSP)**
Keys: **N/A**

1. In the middle pane of the Material Inspection Detail window, in the **Material Component** column, select **Class F FLYASH**.

   NOTE: The DWR Sample Check box indicates a sample has been created for the material.

2. On the toolbar, click the **View Material** button. SiteManager displays the Material Detail window's **Description** panel.

3. Click the **Tests** tab. SiteManager displays the **Tests** panel.

4. Click the **Close** button to return to the Material Inspection Detail window.

*You've accessed the Material Detail window for the selected material.*

# Review

To display the Daily Work Reports window:

1.  On the **Main Panel** panel, double-click the **Daily Work Reports** icon.

2.  On the **Daily Work Reports** panel, double-click the **Daily Work Reports** icon.

To display the Material Inspection Detail window (from the Daily Work Reports window):

1.  On the Daily Work Reports window's Work Items panel's Record Work Item view's toolbar, click the **Open Material Inspection Detail Window** button.

2.  In the **Material Component** column, select the desired material.

To create a sample record from a DWR:

1.  On Material Inspection Detail window's toolbar, click the **Create Sample for Selected Material** button.

2.  On the Maintain Sample Information window, in the **Smpl Type** dropdown list, select the desired choice.

3.  Complete the desired optional fields.

4.  In the **Geog Area** dropdown list, select the desired choice.

5.  On the toolbar, click the **Save** button.

6.  Click the **Addtl Sample Data** tab.

7.  Complete the desired optional fields.

8.  On the toolbar, click the **Save** button.

9.  Click the **Contract** tab.

10. If necessary, in the **Represented Qty** field, type the desired value.

11. On the toolbar, click the **Save** button.

12. Click the **Other** tab.

13. In the **Type** dropdown list, select the **Destination Lab** choice.

14. Using the right mouse button, click on the **ID** field.

15. On the object menu, select the **Search** choice. SiteManager displays the Search Window.

16. In the **Destination Lab** column, double-click the desired choice.

17. If necessary, insert additional rows.

18. On the toolbar, click the **Save** button.

## Summary

Create a second Sample Information Record from a DWR.  Hint:  The first Sample Information Record was created in the Exercises.

Contract:  061043

Inspector: cgayle – Gayle, Crystal

DWR Date:  01/13/09

Material:

   Project Number: DE06300750643

   Line Item Number:  0690

   Item Code: 08100 – CONCRETE CLASS A

Material Component:  CEMENT TYPE I, Material Code 40100

Sample Type:  Project Acceptance

Acceptance Method:  Test Results

Sampler: jbowie – Bowie, James

Producer Supplier:  COP070021 – CEMEX@LOUISVILLE

Geographic Area:  District 05

User your district and section number to create a valid sample id.

# Questions and Answers

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# Answers

In this appendix, find the answers to all of the questions in the exercises:

**Assigning Destination Labs and Tests**

Exercise 2-3

16. Asphalt Emulsion

Summary

4. No. you cannot remove required tests.

**Entering Test Results**

Exercise 4-6

5. High

6. wjudd

Summary

2. 2

3. Need to verify load values.

11. Yes

**Viewing Sample Information**

Summary

3. Failing m-Value.