



Florida Department of TRANSPORTATION



Project Sample User Manual Data Entry Data Reviewers Project Administrators

April 12, 2024

Contents

Introduction.....	4
Warning and Error Messages.....	4
Chapter 1 – Project Sample Life Cycle.....	6
Chapter 2 – Sample Turnaround Time.....	7
Chapter 3 – Sample Login.....	8
A. Creating a Sample.....	8
B. Logging in a Sample for a Work Order Nonstandard JGS (NSJG).....	16
C. Viewing the Sample Transmittal Information for Print.....	17
D. Viewing the Sample Certificate of Analysis.....	18
Chapter 4 – Sample Login Field Summary.....	19
A. Sample Login Screen Fields for Project Samples.....	19
B. Sample Login Screen Fields for Certification Documents.....	23
Chapter 5 – Creating a New Sample from an Existing Sample.....	24
A. Issues with Creating a Sample from another Sample.....	24
B. Creating a Sample from another Sample.....	24
Chapter 6 – Sample Receipt.....	27
A. Sample Receipt.....	27
B. Updating the Received Date.....	29
C. Request Additional Information (User in the company of a lab).....	29
D. Respond to Additional Information Request (User in the company that created the sample).....	31
E. View Additional Info Comments (User in the company of a lab).....	32
F. Returning the Physical Sample (User in the company of the lab).....	33
G. Addressing a Returned Sample (User in the company that created the sample).....	33
1. Resubmitting the Returned Sample.....	34
2. Routing the Returned Sample to a Different Lab.....	34
3. Deleting a Returned Sample.....	34
H. Routing a Sample to Another Lab.....	34
I. Receiving a Routed Sample.....	36
J. Remove Routed Lab.....	36
K. Sample Chain of Custody on a Full Reroute.....	37
L. Sample Chain of Custody on a Partial Reroute.....	38
Chapter 7 – Result Entry.....	39
A. Result Entry for Samples that are not Rerouted at Sample Receipt.....	39
1. Entering Results for a Single Test.....	39
2. Designating a Required Test as Not Performed.....	42
3. Optional Tests.....	43
4. Adding Tests.....	43
5. Special Tests.....	43
6. Entering Results for Multiple Tests.....	43
B. Performing a Retest.....	46
C. Result Entry for Samples that are Rerouted at Sample Receipt.....	46
Chapter 8 – Viewing the Sample History.....	48

Chapter 9 – Opening a Sample for Updates before the Sample is Submitted for FDOT Verification.....	49
A. Reopening a Sample for Sample Data Entry during Sample Life Cycle (PA, District Application Coordinator, System Administrator)	49
B. Making Sample Data Corrections (Data Reviewer).....	50
Chapter 10 – Sample and Test Data Review and Submitting Samples for FDOT Verification	52
A. Reviewing the Sample Header Data	52
B. What Should Not Be Changed on a Sample	52
C. Reviewing the Test Data	52
D. Submitting the Sample to FDOT for Verification	53
Chapter 11 – Sample Comments.....	54
A. Adding a Comment to the Sample	54
B. Updating a Comment on the Sample	54
C. Deleting a Comment on the Sample	55
D. Responding to Another’s Comment	55
E. Updating a Response.....	56
F. Deleting a Response.....	57
Chapter 12 – Sample Documents.....	58
A. Adding a Document to the Sample.....	58
B. Viewing Uploaded Documents	59
C. Updating a Document Description.....	60
D. Deleting an Uploaded Document	60
Chapter 13 – Witnessed By Samples	62
A. What is a Witnessed By Sample?	62
B. QC Data Entry for a Witnessed By Sample.....	62
C. VT Data Entry for a Witnessed By Sample	62
Chapter 14 – Deleting a Sample.....	64
Chapter 15 – Sample Finalization.....	66
A. Finding a Sample Awaiting Finalization (PA)	66
B. Reviewing the Sample and Test Data (PA).....	66
C. Returning a Sample for Sample Data Correction (PA)	67
D. Correcting the Sample Data and Returning the Sample to FDOT (Data Reviewer)	68
E. Returning a Sample for Test Result Entry Correction (PA)	69
F. Correcting the Test Results and Returning the Sample to FDOT (Data Reviewer).....	70
G. Returning a Sample for both Sample and Test Corrections (PA).....	72
H. Correcting the Sample and Test Data and Returning the Sample to FDOT (Data Reviewer)	73
I. Finalizing the Sample (PA).....	73
Chapter 16 – Comparison Packages.....	74
A. Creating a Comparison Package	74
B. Adding Associated Samples to a Comparison Package	77
C. Adding Resolution to a Comparison Package that Does Not Compare	77
D. Designating Resolution Not Performed	79
E. Creating an Incomplete Comparison Package	79
F. Printing the Comparison Package Information Report	81
G. Deleting a Comparison Package.....	82

Introduction

This manual describes the sample life cycle for samples taken for project material acceptance. They are general in nature to describe the functions and sample life cycle stages. Specific sample creation and life cycle instructions can be found on the [Materials Acceptance and Certification Information](#) website. For example, there are specific instructions for:

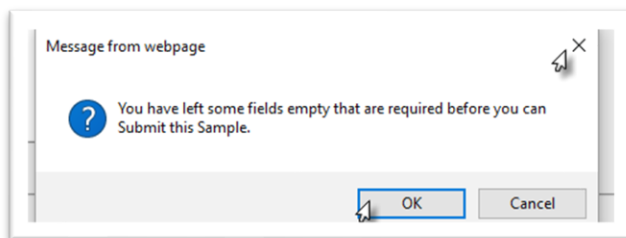
- Each major material
 - [Asphalt Plant Samples](#)
 - [Rolling Straightedge pre 07/2020](#)
 - [Rolling Straightedge Post 07/2020](#)
 - [Project Structural Concrete](#)
 - [Earthwork/Soils Samples](#)
- Samples logged in for SMO
 - [Random Sample](#)
 - [Certification Document Samples](#)
 - [Pavement Smoothness Ride Acceptance short instructions](#)
 - [Pavement Smoothness Full Instructions](#)

MAC is a web based application. The screen appearance in this manual may be slightly different depending on the browser you are using and the settings on your computer such as resolution and zoom. Also, you may or may not see all the menu options and functions that appear on the screen shots, depending on your role set.

Warning and Error Messages

A warning can be dismissed upon reading it and you can continue with the process. It signifies something in the data that might be an issue under certain circumstances, but not always. An error means that there is something so critical that you are not permitted to proceed. The error must be addressed before you can advance.

An example of a warning would be if you attempted to save a sample without all the required information.



Select the X to close the dialog box and go back to the sample to complete more fields. Or select the OK to proceed with saving the sample without the required fields. MAC will let you save the sample, but you will not be able to submit it until you supply the required fields.

Another example of a system warning that can be dismissed is the off-list flags that appear on asphalt and concrete samples. These appear with the word **WARNING** in capitals with bold, red font.



WARNING: This is an Offlist Production Facility. Production Facility A0ABC1 - Asphalt Production Facility for training purposes is not listed on the QCP for this contract. ✖

An example of an error is submitting a sample without required fields.

ERRORS:

- Date Sample Taken is required
- Contact Name is required
- Cell Phone # is required
- Office Phone # is required
- Email is required

Save Save and Submit

The Save and Submit option is available (not greyed out) but clicking on it will only regenerate the error message until the error is addressed.

Conflict of interest is another example of an error message that will not allow you to proceed. If you attempt to log a sample with a specific contract and sample level under your company and there is another sample with a different sample level under the same contract you will receive a conflict of interest error message.



ERROR: Due to Conflict of Interest, the same Lab (or a different Lab from the same Company) cannot be used on a QC and a VT sample for the same Contract

Save Save and Submit

For example, if you are trying to log in a sample under a contract with the sample level of VT and there is an existing sample on that contract with the sample level of QC, MAC will give you this error message and not allow you to log the VT sample. In many cases, this is a true conflict of interest and you must notify the District Materials and Research Office (DMRO) to determine what to do next. The QC sample could be a concrete program sample for prestressed concrete producer making products for the contract and the VT sample may be for soils samples taken on the project. It is a conflict of interest even though the samples are for different materials because the conflict applies across all materials for the entire contract.

Or it might be because the existing QC sample is a data entry error. Notify the local DAC to have the sample with the data entry error deleted. Then there will no longer be a conflict and you will be able to enter the sample with the sample level VT.

Chapter 1 – Project Sample Life Cycle

The MAC project sample life cycle documents sample status and sample chain of custody. Whether a sample is considered to be open or closed is a business definition and does not appear as part of the sample display, such as the sample status or lab status. The table below describes each of the stages and whether a sample is open or closed at that stage.

Action taken by User	Sample Life Cycle Stage	Open or Closed?
Sample is created and saved	Logged	Open
Sample is created and submitted	Submitted for Lab Testing*	Open
Data Reviewer submits for FDOT Verification	Pending Finalization	Open
PA returns the sample for sample data corrections	Sample Data Correction Needed	Open
Data Reviewer revises sample data and returns to FDOT	Pending Finalization	Open
PA returns the sample for test corrections	Test Correction Needed	Open
Data Reviewer revises test data and returns to FDOT	Pending Finalization	Open
PA returns the sample for sample and test data corrections	Sample Data and Test Correction Needed	Open
Data Reviewer revises sample and test data and returns to FDOT	Pending Finalization	Open
PA finalizes Samples	Finalized	If Comparison is not required = Closed If Comparison is required = Open

*All samples, both lab and field are designated as "Submitted for Lab Testing". In the case of field samples, there is no lab to receive the sample or lab tests to be performed. It's simply submitted for testing, but MAC uses the same term for all sample statuses.

Lab Status during Submitted for Lab Testing	
Lab status is different from the sample status. Lab status does not impact samples being considered open or closed.	
Action Taken by User	Lab Status
Sample is saved	Waiting on Sample to be Submitted
Sample is submitted	Waiting on Receipt or Auto-Receipt
Lab returns sample for additional Information	Additional Info Required
Lab user returns sample	Returned
Lab user receives sample	Received
Lab user opens sample header for sample info updates	Waiting on Sample to be Submitted

Comparison Package Status		
Action taken by User	Comparison Status	Open or Closed?
PA creates comparison package but does not run comparison	Comparison not Performed	Open
PA runs comparison on Comparison package and Compares	Compares	Closed
PA runs comparison on Comparison package and Does Not Compare	Does Not Compare	Open if Resolution is required Closed if Resolution is not required
PA designates Incomplete Package	Incomplete Package	Closed
PA performs Resolution	Does Not Compare	Closed
PA Marks Resolution Not Performed	Does Not Compare	Closed

Chapter 2 – Sample Turnaround Time

Specifications Section 105 states that samples must be processed daily. The Department defines daily as within a 24 hour time frame. This is not a single time frame but applies to all the stages of the sample life cycle. It applies to all sample levels, not just QC or PC. VT, IV and RT must be processed in a timely manner so that comparison packages can be created to determine if resolution is needed. **Data Reviewers and PAs should double check all sample dates – date sample taken, date received and date(s) test(s) performed.**

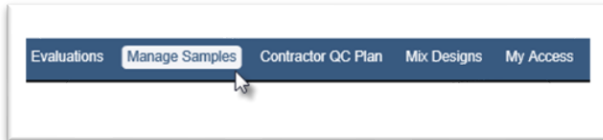
Sample action	Required Turnaround Time	Example
Material is taken for a sample	Sample must be logged in MAC within 24 hours	A soils sample taken on 10/01 must be logged into MAC by 10/02.
Physical sample is received at a laboratory	Sample must be received in MAC within 24 hours of the sample being physically received by the lab	A company drops a soils sample on the lab loading dock on 10/3. Sample must be received in MAC no later than 10/4 (but designated that it was received on 10/3).
<i>For samples that are auto-received – make sure to update the Date Received if the sample is not created on the same day it is sampled and tested.</i>		
Test(s) performed	Each test's data must be entered in MAC within 24 hours of the test being performed	A concrete sample is tested for ASTM C39 on 10/4. Results must be entered into MAC no later than 10/5.
<i>When test data entry selects perform multiple tests, do not select any tests not being performed on the same day.</i>		
Data Reviewer reviews test data & submits sample to FDOT	Sample must be submitted to FDOT for verification within 24 hours of the last test being entered.	Data Reviewer reviews the same concrete sample listed above and submits no later than 10/6.
PA finalizes sample	PA should review and finalize sample within 24 hours of the Data Reviewer submitting the sample	PA reviews and finalizes or returns concrete sample no later than 10/7.
PA returns the sample for sample or test corrections	PA should review and return sample within 24 hours of the Data Reviewer submitting the sample	
PA creates comparison packages	PA should create the comparison package no later than 24 hours after the last comparison sample (either the original or verification sample) is finalized.	PA finalizes VT concrete comparison sample on 10/7. PA should immediately create comparison package, but no later than 10/8 in case of a non-comparison so that resolution can be initiated.
Resolution is performed	All sample turnaround times apply to resolution samples. PA should finalize and add resolution to the comparison package no later than 24 hours after resolution sample is submitted to FDOT for verification.	<ul style="list-style-type: none"> Concrete sample comparison package consist of CC20001Q, CC20002Q and CC20002V Comparison status is Does not Compare. Specification Section 346 states that resolution must be performed within 14 days of the acceptance test (10/4) Resolution must be completed by 10/18 Results must be entered by 10/19 Sample must be submitted to FDOT by 10/20 and finalized by 10/21 Sample should be included in the comparison package immediately, but no later than 10/22 Associated samples CC2003Q and CC20004Q can be included later

Chapter 3 – Sample Login

A. Creating a Sample

You must be in your company roles to create a sample.

To log in a sample:



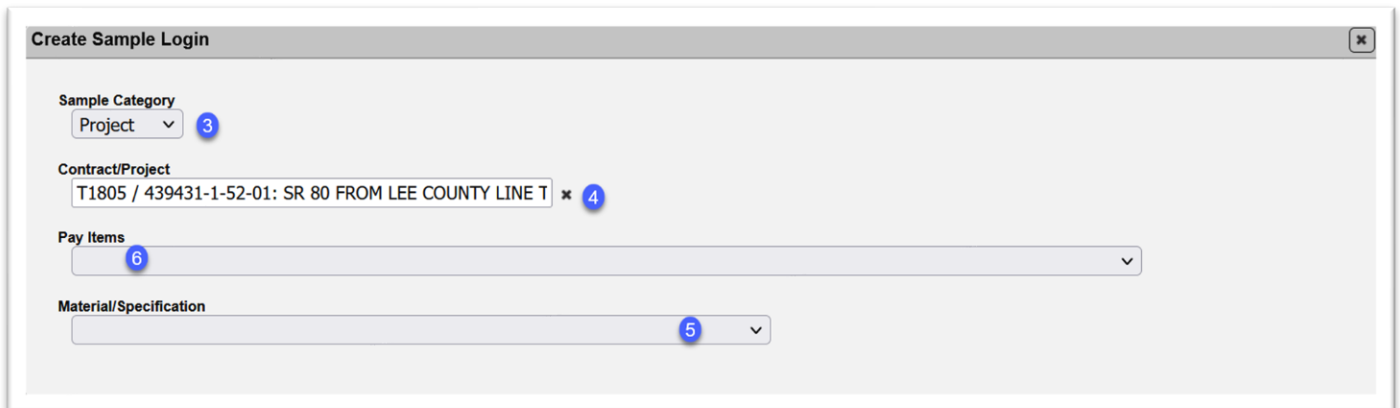
1. Select the Manage Samples option from the MAC menu.

You will be navigated to the Sample screen.



2. Select the Create Sample Login option.

The Create Sample Login dialog box will appear. A red or orange star (★) indicates a required field. These instructions will only cover the basic fields that may appear on every sample. See [Chapter 4 – Sample Login Field Summary](#) for a description of each field.

A screenshot of a 'Create Sample Login' dialog box. The dialog has a title bar with the text 'Create Sample Login' and a close button (X). The main area contains four fields, each with a blue circle containing a number: 1. 'Sample Category' is a dropdown menu with 'Project' selected and a blue circle with the number '3' to its right. 2. 'Contract/Project' is a text input field containing 'T1805 / 439431-1-52-01: SR 80 FROM LEE COUNTY LINE T' and a blue circle with the number '4' to its right. 3. 'Pay Items' is a dropdown menu with a blue circle with the number '6' to its left. 4. 'Material/Specification' is a dropdown menu with a blue circle with the number '5' to its right.

3. **Sample Category** – this field defaults to Project. Leave it as is for project samples.

4. **Contract/ Project** – enter the Contract or Financial Project Number (FPN) in the Contract/Project field. The field will search on either entry. From the returned search results, select the appropriate entry.

NOTE: There are entries available for selection that do not apply to MAC. You should not select entries that are not appropriate in MAC. Use more characters in the contract/project field to filter out these entries. For example, do not select an FPN with a “32-01” in it.

NOTE: Sometimes an FPN has two contract ids associated to it. This means that there are two contracts associated to the FPN in the system of record, not in MAC. Most of the time this is caused by a data entry error in the system of record. When an FPN is on more than one contract, the PA must notify a system administrator or DAC. Data Entry personnel must use care in selecting the appropriate contract.

NOTE: If you attempt to create a sample on a contract that a Project Materials Certification Letter (PMCL) has been generated, you will receive an error.

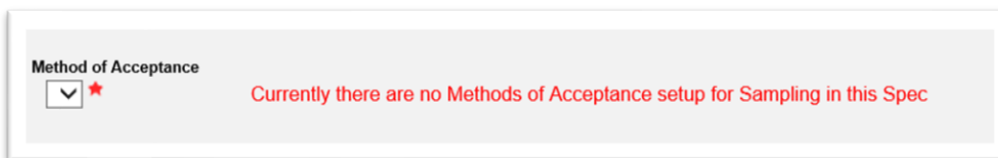
NOTE: *The Construction Project Administration Manual (CPAM) Section 11.6* designates that asphalt samples on projects with more than one FPN should be entered under the primary FPN. For consistency, the asphalt plant records should also be entered under the primary FPN in MAC only. Do not select Additional Project(s) for asphalt samples.

After you select the FPN, more fields will appear on the Create Sample Login screen.

5. **Material/Specification** – you do not have to enter the fields in the order they appear on the screen. The pay item field comes next, but it is better to select the Material/Specification before selecting the pay item. Select the appropriate Material/Specification from the dropdown list.

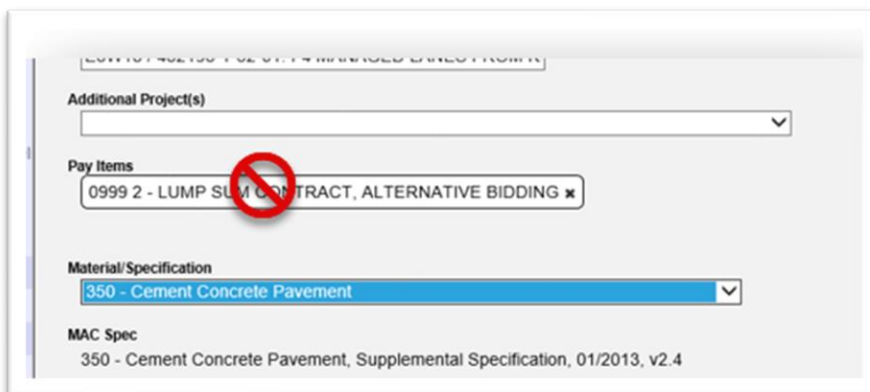
NOTE: On a sample for a standard JGS, materials on an FPN on the contract, but not on the FPN selected in field #4 should appear in the Materials/Specifications dropdown. It is a distinct list of all materials on all FPNs on a contract for standard JGS.

NOTE: All materials assigned to the contract on the JGS will be available for selection in this field, but some may not have samples to be logged into MAC. If you select a material that does not have MAC entries, you will see this error message. It states that there are no Sampling Method of Acceptance requirements on the MAC Spec. That does not mean that there are no Method of Acceptance requirements. For example, Specification Section 347 Method of Acceptance is the delivery ticket which is not logged into MAC. There is a MAC Spec 347 describing the delivery ticket and frequency. If you attempt to log a sample in with the delivery ticket, you will see this message.



6. **Pay Items** – pay item selection is **OPTIONAL** and multi-select. If a sample represents more than one pay item, you can select more than one entry.

NOTE: For contracts with one pay item, like Lump Sum (999) and Design Build (50) or contracts with no pay item, **DO NOT select** a pay item.



With this information, the system knows which login screen to display. The Continue to Sample Information Screen option will appear in the dialog box.

7. **Continue to Sample Information Screen** – select this option to display more of the sample login screen.

As selections are made, more fields appear. A field will default when there is only one value for that field.

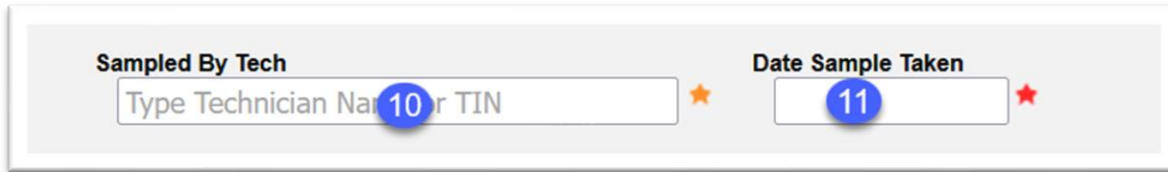
8. **Sample Level** – select the Sample Level for the sample.

If the MAC Spec has categories, the next field that will appear is Category.

9. **Category** – this field is a combination of category and type for MAC Specs that have categories and types, or just category for MAC Specs that only have categories.

What is a category and a type? A category is a way to subdivide the MAC Spec into appropriate samples. A type is a subdivision of the category. Not all MAC Specs need subdivision. What is used as category and type depends on the MAC Spec so there is no standard definition. MAC Spec 334 has no categories and types because the samples can be divided by Sample Level.

NOTE: There could be different requirements for each category, type, and purpose. This selection determines the tests assigned to the sample and the limits for pass/fail assigned to each test.

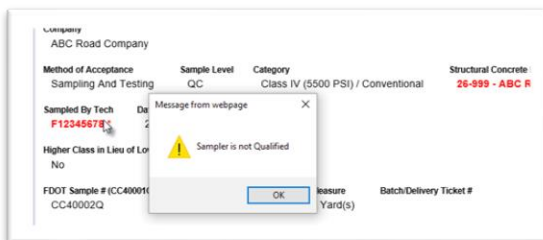


10. Sampled By Tech – enter the name or TIN of the technician who took the sample. In cases where a qualified technician is required, the field will accept a name or a TIN to search the CTQP database and return possible technicians. If the sample does not require a qualified technician, you can enter the sampler’s name as a text field. The system will not interface with the CTQP database if the sample does not require a qualified sampler.

NOTE: If the MAC Spec requires a qualified sampler, the person must have at least one qualification in the CTQP database and stored in MAC to appear on the list. If the person who took the sample is not qualified in anything (doesn’t have a TIN), the sample cannot be used for acceptance and must be discarded. A new sample must be taken by a qualified person.

This does **NOT** mean that the person must be qualified in the qualification area required by the MAC Spec to get the sample in the system. If the person has a TIN in the CTQP database, the sample will accept the entry, then check to see if the person is qualified in the qualification area the MAC Spec requires on the date the sample was taken.

If the person is not qualified in the appropriate qualification area at the time the sample was taken, the sample will be flagged with an unqualified TIN message. If the technician who took the sample is not qualified in the qualification area required at the time the sample was taken and it is not a data entry error, this is an Exception on the Project Materials Certification Letter (PMCL).



If you see this message, review the qualifications in the CTQP database to confirm it is true. The technician may need to contact the CTQP Administrator and provide additional information, such as proof of prerequisites or coordinate if the same technician inadvertently has multiple TINs. When the data is updated in the CTQP database, MAC will receive the updates in the nightly refresh. In some cases, this will remove the unqualified sampler flag. In other cases, the sample may need to be returned for sample corrections (Chapter 15, [C. Returning a Sample for Sample Data Correction \(PA\)](#)) to reenter the flagged TIN with the corrected TIN.

11. Date Sample Taken – enter the date the sample was taken or select it from the calendar.

FDOT Sample # (CC40001Q) Quantity Represented Unit of Measure

LOT #

Intended Use

12. **FDOT Sample #** – enter the FDOT Sample #. Some materials have a sample numbering system. In most cases, the display will show an example of the numbering system as shown in the screenshot above. Other materials do not have a numbering system and any sample numbering can be used.

13. **Quantity Represented** – enter the quantity that sample represents in the Quantity represented field. For example, if the sample quantity represented is 50 cubic yards, enter 50.

14. **Unit of Measure** – enter the unit of measure that sample represents in the Quantity represented field. For example, if the sample quantity represented is 50 cubic yards, enter Cubic Yard(s).

15. **LOT #** – enter the Lot # in the field.

16. **Intended Use** – enter the intended use, if desired.

Testing Lab

C0ABC1 - ABC Road Company

Testing Lab

C0ABC1 - ABC Road Company

17. **Testing Lab** – the testing lab can be entered using either the lab facility id or the description. Select the appropriate entry from the returned list.

Location information may or may not appear on the sample login. It may not be required if it does appear. The location information becomes critical if the sample has issues that need to be addressed in the Materials Acceptance Resolution (MAR) process. Because it is not known at the time the sample is taken if there will be issues, the best practice to include location information even if it is not required as long as it appears on the login screen. Some Project Administrators may require the information on any sample with location fields even when they are not required by the system.

The screenshot shows a 'Location Info' form with the following fields and callouts:

- 18**: 'Sampled From' text input field.
- 19**: 'Road Number' text input field with placeholder text 'Start typing roadway id description to get list of roadways'.
- 20**: 'Latitude' text input field.
- 21**: 'Longitude' text input field.
- 22**: 'Station Sampled' text input field.
- 23**: 'Station From' text input field.
- 24**: 'Station To' text input field.
- 25**: 'Reference Line' dropdown menu.
- 26**: 'Offset Distance' text input field.
- 27**: 'Offset Direction' dropdown menu.

18. **Sampled From** – enter information regarding where the sample was taken; for example, stockpile or truck mixer.

19. **Road Number** – enter the appropriate RCI Roadway Id and select it from the returned list. This field is connected to the Roadway Characteristics Inventory (RCI) database and can be found on the project key sheet:



20. **Latitude** – enter the latitude location where the sample was taken in the Latitude field. This field is used in conjunction with the Longitude field to pinpoint the exact sample location.

21. **Longitude** – enter the longitude location where the sample was taken in the Longitude field. This field is used in conjunction with the Latitude field to pinpoint the exact sample location.

22. **Station Sampled** – enter the station where the sample was taken.

23. **Station From** – enter the beginning station location of the area represented by the sample.

24. **Station To** – enter the ending station location of the area represented by the sample.

25. **Reference Line** – select the controlling line of the project as shown in the plans. If the option used is not listed on the dropdown list, make a comment in the comments section describing the reference line.
26. **Offset Distance** – enter the offset distance in feet.
27. **Offset Direction** – select the offset direction from the dropdown list.

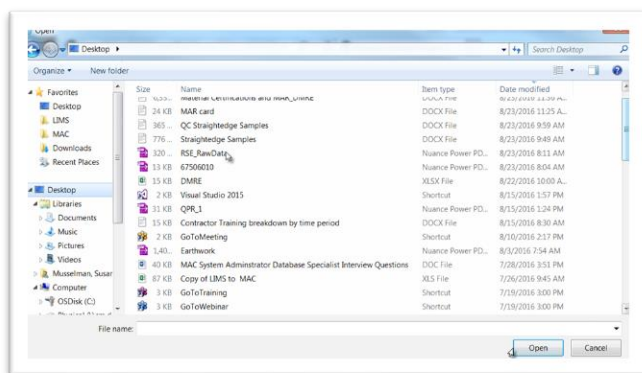
The screenshot shows a form titled "Contact Info" with four input fields: "Contact Name", "Cell Phone #", "Office Phone #", and "Email". Each field has a red star icon to its right, indicating it is required. Blue callout boxes with numbers 28, 29, and 30 are placed over the "Contact Name", "Cell Phone #", and "Email" fields respectively. Below the input fields is a "Comment" section with a text area labeled "Comment" and a blue callout box with the number 31.

28. **Contact Name** – enter the name of the sample contact person. This may or may not be the same person as the sampler. It is a person the laboratory can call or email if there are questions about the sample.
29. **Phone Number(s)** – enter either the Cell Phone # or Office Phone # of the contact person (#28) in the appropriate field. Only one is required. As soon as one is entered, the other required field designator disappears. Both can be provided for informational purposes.
30. **Email** – enter the email address of the contact person.
31. **Comment** – enter any comments about the sample you wish to make. If you do not make a comment now, you will be able to add comments later under the comments tab if your company or system roles have custody of the sample. See [Chapter 11 – Sample Comments](#).

The screenshot shows a form titled "Document" with a "Choose File" button and the text "No file chosen". A blue callout box with the number 32 is placed over the "Choose File" button. Below this is a "Description ?" label and a text area with a blue callout box with the number 36. At the bottom of the form are two buttons: "Save" and "Save and Submit", with a blue callout box with the number 37 placed over the "Save and Submit" button.

32. **Document** – to attach a document, click on the Select File option.

The Open dialog box will appear.



33. Navigate to the location where the document is stored.
34. Click on the document to select it.
35. Click on the Open option to upload the document to the sample.
36. **Description** – enter a description of the document, if desired.

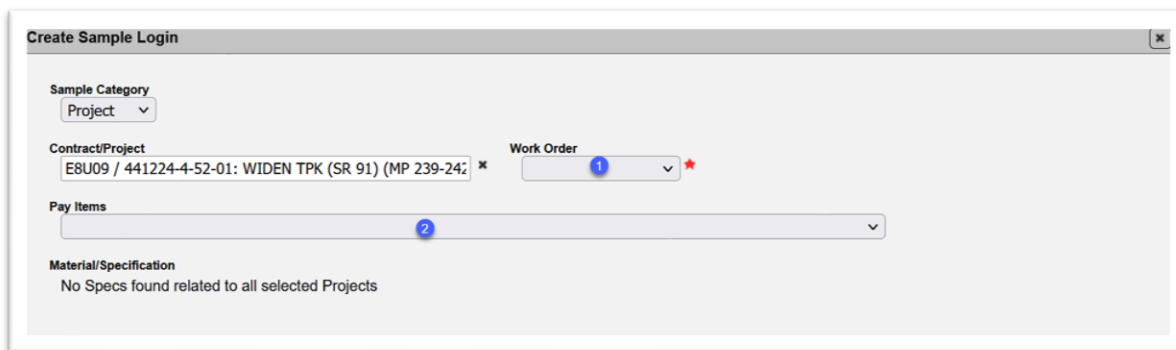
The document will appear as attached to the sample. Some samples will require a document attachment. If you don't attach a document at this time and one is not required, you can add documents to the sample later. See [Chapter 12 – Sample Documents](#).

37. Save and Submit –

- a. **Save** – select Save if you are not ready send the sample for testing and want to save the data you have entered so far.
- b. **Save and Submit** – select Save and Submit if you are ready to send the sample for testing (lab samples) or to enter test results (field samples). If you select Save, the sample will be designated as Logged and will need to be Submitted for Testing in order for the test results to be entered on the lab tests.

B. Logging in a Sample for a Work Order Nonstandard JGS (NSJG)

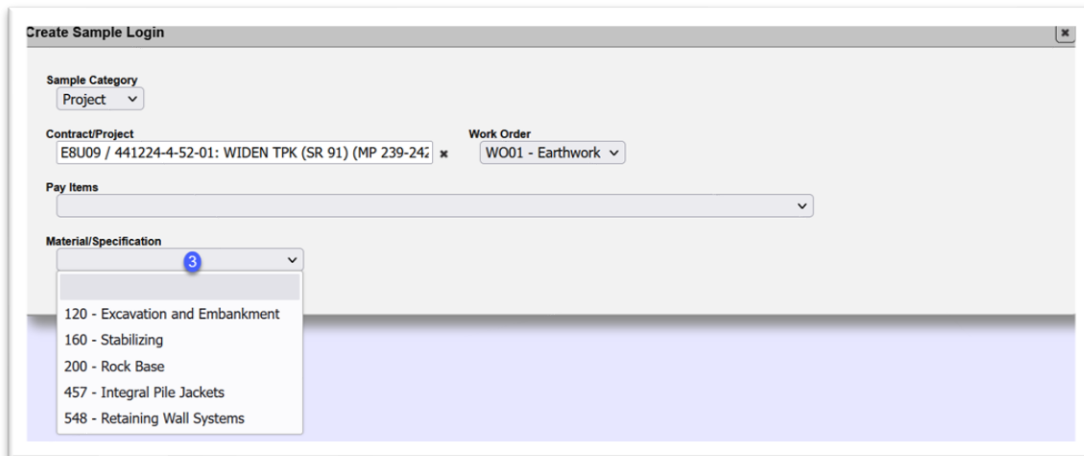
When a sample under a Work Order NSJGS is logged in, the Create Sample dialog box looks slightly different, especially when there is more than one Work Order NSJGS for the same FPN.



1. **Work Order** – Select the appropriate Work Order entry from the dropdown. You must select this field first when logging in a sample for a NSJGS with work orders.
2. **Pay Item** – do not select a pay item for a Work Order sample.

NOTE: Because Work Orders may have the same material(s) but different Begin Dates, therefore different MAC Supplemental Specifications, the Work Order field must be selected first. If there is only one Work Order NSJGS entry, this field will default to the single entry.

The Material/Specification field appears when the Work Order has been selected.

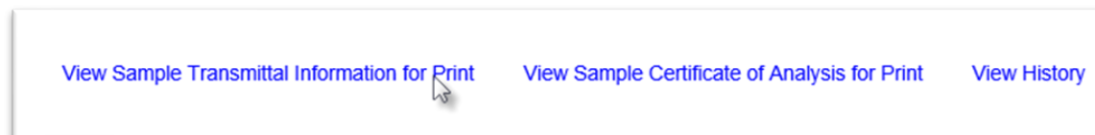


3. **Material/Specification** – select the appropriate Material from the dropdown.

From this point, the sample login is the same as previously described.

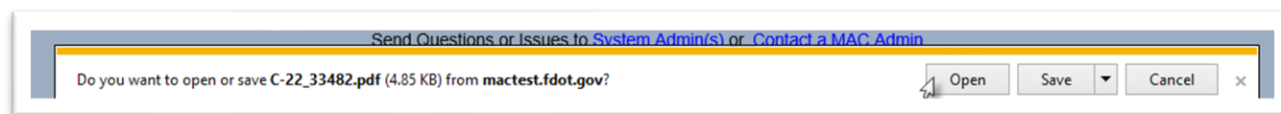
C. Viewing the Sample Transmittal Information for Print

Many laboratories require the Sample Transmittal Information report with the MAC Sample Id be attached to the sample.



1. Select the View Sample Transmittal Information for Print option.

When the information is download, a dialog box will appear. The appearance of the dialog box is a function of the browser you are using.



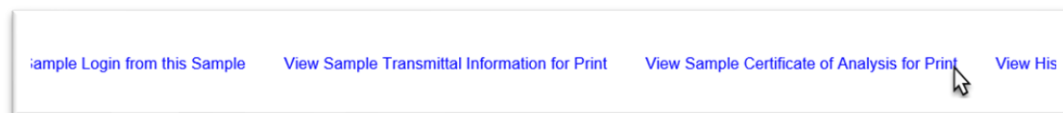
2. Select Open to open the report in pdf format.

The report will open in the application that is your default pdf file reader. The MAC Sample Id is automatically generated on the report. The report may be more than one page. Be sure to include all pages with the sample.



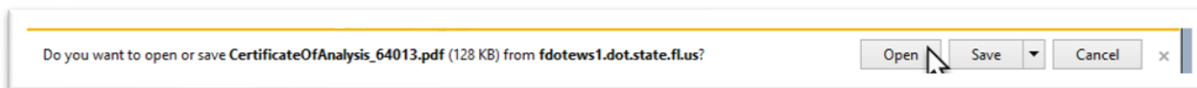
D. Viewing the Sample Certificate of Analysis

The Sample Certificate of Analysis is a standard report that can be found on the MAC reports menu. Because it is a useful report for the sample life cycle, you can also generate the Sample Certificate of Analysis report from the sample screen without having to navigate away from the sample to the Reports screen.



1. On the sample screen for a specific sample, select the View Sample Certificate of Analysis for Print option.

A download dialog box will appear. The appearance of the dialog box is a function of the browser you are using.



2. Select the Open option to open the report in pdf format in the default application for pdf files.

The report will open in the default pdf application on your computer. Depending on where the sample is in the sample life cycle, some fields may not be populated. For example, if the sample is awaiting testing, all or some of the test result fields may be blank.



Chapter 4 – Sample Login Field Summary

Because sample login screens are created dynamically on the MAC Spec, there is no standard login screen. There is a defined number of fields that can appear on a login screen, but no login screen has them all. This chapter describes the fields and the data that is expected in each field.

NOTE: ERS field samples are direct data entry. For remote contracts or loss of MAC connectivity, use QC and VT ERS Forms (**Form No. 675-020-27** and **Form No. 675-020-28**).

A. Sample Login Screen Fields for Project Samples

Create Sample Fields		
Field	Data	Comment
Sample Category	Project, Program, Research	Defaults to Project.
Project Sample Category Fields		
Contract/Project	A search field for all contracts and projects in the Work Program.	Since the system retrieves ANY valid FPN, users must be careful to ensure they are selecting the appropriate FPN. For asphalt samples, select the primary FPN.
Pay Items	A search field for the pay items that are on the FPN(s) in PrC.	This field is optional. Samples can represent multiple pay items Do not select for LS/DB/LAP jobs.
Material/Specification	A search field for the MAC Specs assigned to the JGS.	If the material is not on the JGS, it will not appear.
Sample Info		
Field	Data	Comment
Method of Acceptance	A dropdown list that appears when the MAC Spec selected has both Certification and Sampling and Testing MOAs.	
Sample Level	A dropdown list containing the sample levels assigned on the MAC Spec.	
Category/Type	A dropdown list containing categories or categories and types if the MAC Spec selected has them.	If the MAC Spec has Categories and Types, the fields are concatenated into one selection.
Sample Purpose	A dropdown list containing sample purposes if the MAC Spec selected has them.	
[Material Type] Production Facility	A search field that searches on the production facility id or description.	Field can be restricted to a specific material type.
Mix Design	A search field that appears after the production facility is selected.	Restricted to the mix designs for the company of the production facility.
Mix Design Free Text	A free text field to type in the mix design number when it is not a mix design in MAC.	Used for materials like auger cast pile grout and building concrete.
Manufacturer	A free text field to type in the name of the product's manufacturer.	
APL Product	A search field connected to the APL.	

Field	Data	Comment
Sampled By Tech	A search field for the Name or TIN in CTQP if MAC Spec requires a qualified sampler.	A sample login will have either the Sampled By Tech or Sampled By field, never both.
Sampled By	A free text name field if the MAC Spec does not require a qualified sampler.	
Date Sample Taken	The date the sample was physically taken.	
Higher Class in Lieu of Lower Class	A check box on structural concrete samples that is used to designate that a higher class of concrete was substituted for a required lower class.	Selecting the check box causes Lower Class field to appear.
Lower Class	A dropdown list with concrete classes to indicate the lower class the material represents. Make sure to select a class lower than the one used in the category/type field.	Results are compared to both targets & limits & assigned two test dispositions. The limit for the lower class is used for the acceptance.
Proctor Sample	On ERS field density samples, the MAC Sample Id of the proctor sample for the material being tested for compaction is entered.	Must be in the same MAC Spec as the field density. Sample must have a standard, modified proctor or pit proctor reporting test.
Load Number	A free text field to enter the load number.	
FDOT Sample Number	A free text field to enter the FDOT Sample Number.	
Quantity Represented	A numeric field to enter the number part of the quantity represented field.	For example, if the quantity represented is 50 Cubic Yard(s), enter 50.
Unit of Measure	A search field to enter the measured unit part of the quantity represented field.	For example, if the quantity represented is 50 Cubic Yard(s), enter Cubic Yard(s).
Batch #	A free text field to enter the manufacturer's batch number. This is not the same as the batch/delivery ticket #.	
Batch/Delivery Ticket #	A free text field to enter the producer's delivery ticket number.	This is normally used for the delivery ticket number for structural concrete.
Heat/Coil No.	A free text field for reinforcing materials to enter the steel heat number or coil no.	
LOT #	A numeric field to enter the lot number the material represents.	
Sample Quantity Required No Density	Tonnage for the Lot not requiring Density.	For example, if the quantity represented is 50 Tons, enter 50.
Sample Quantity Required No Density Unit of Measure	Ton(s)	For example, if the quantity represented is 50 Tons, enter Ton(s).
Sublot #	A dropdown list of 1, 2, 3, or 4 to designate the asphalt subplot the sample represents.	Asphalt is the only material with sublots.
Alternate Density Sublot Number	A dropdown list of N/A, 1, 2, 3 or 4 when the cores were taken in a different subplot from the Sublot # field above.	Selecting this field triggers programming in the comparison package and CPF calculations.
Intended Use	A free form text field to provide details of the material's use.	
Point of Sampling	A dropdown list with selections of common sampling points.	
Wall #	A free text field for the Wall # from the contract plans.	
Bridge #	A free text field for the FDOT bridge #.	
LOTs represented	A free text field for all the lots the sample represents.	

Field	Data	Comment
Soil Description	A description of the soil for Soils samples that includes color, texture (sometimes sampling area).	Examples: Tan silty sand (Pond A). Gray sand with traces of dark organic matter (Pond B)
Witnessed By Company	The company of the VT technician who witnessed the QC rolling straightedge or thickness sample.	Used for Rolling Straightedge samples for contracts let on or after July 1, 2020.
Ride Acceptance Sample Fields		
Date Requested	The date the laser profile is being requested.	If the test is being requested to be performed on 01/01/2020 at 10:00 AM, enter 01/01/2020.
@	Time the laser profile is being requested.	If the test is being requested to be performed on 01/01/2020 at 10:00 AM, enter 10:00 AM.
Paving Time	Dropdown list to indicate if project paving time occurred in the daytime, at night or both.	
Design Speed	Dropdown list to indicate the roadway's design speed.	
Date Scheduled	Date field available upon sample receipt to indicate the actual date the test is scheduled to be performed.	If the test is being scheduled to be performed on 01/01/2020 at 10:00 AM, enter 01/01/2020.
@	Time the laser profile is being scheduled.	If the test is being scheduled to be performed on 01/01/2020 at 10:00 AM, enter 10:00 AM.
Location Info		
Sampled From	A free text field to enter the location the sample was taken from.	Acceptable values can be a station number (although the Station Sampled field represents this too), truck mixer, stockpile, etc.
Road Number	A search field connected to the Roadway Characteristics Inventory (RCI) database. Can be found on the project key sheet.	It is an 8-digit number usually ending with 4 zeros; for example, 87030000.
Beginning Mile Post	A free text field to enter the beginning mile post that the material represents.	For example, if the sample represents material from MP 1.003 to MP 1.015, enter 1.003.
Ending Mile Post	A free text field to enter the ending mile post that the material represents.	For example, if the sample represents material from MP 1.003 to MP 1.015, enter 1.015.
Latitude	A free text field to enter the latitude where the sample was taken.	For example, if the sample was taken at 21.23568, -81.54321, enter 21.23568.
Longitude	A free text field to enter the longitude where the sample was taken.	For example, if the sample was taken at 21.23568, -81.54321, enter -81.54321. The minus sign is important.
Station Sampled	A station formatted field to enter the sample location where the sample was taken.	If the sample was taken from station 1014+88, enter 101488 and MAC will input the + between the 4 and the first 8.

Field	Data	Comment
Station From	A station formatted field to enter the beginning station number that the material represents.	
Station To	A station formatted field to enter the ending station number that the material represents.	
Lane	A dropdown field to indicate the roadway lane that the sample was taken from.	
Reference Line	A dropdown field to indicate the surveyed line that was used to designate Station Sampled, Station From, Station To, Offset Distance and Offset Direction.	This must be a controlling line of the project as shown in the plans. If the option used is not listed on the dropdown list, select "Other" and make a comment in the comments section describing the reference line. It must be a valid survey line that can be relocated if needed.
Offset Distance	A numeric field to enter the distance from the reference line that the sample was taken.	
Offset Direction	A dropdown field to indicate if the sample was taken to the right of the reference line or to the left of the reference line.	
Contact Info		
Contact Name	A free text field to enter the name of a person who can answer questions about the sample if questions arise.	It should be someone with enough knowledge about the sample and material requirements to answer questions from the laboratory receiving the sample.
Cell Phone #	A phone formatted field to enter the contact person's cell phone.	A phone formatted field means if the phone number is (555) 123-4567, enter 5551234567 and MAC will format it for you.
Office Phone #	A phone formatted field to enter the contact person's work phone.	Only one is required, office or cell. When you enter one, then the other field is no longer designated as required.
Email	Enter the contact person's email address.	
Comments		
Comment	A free form text field to enter additional information about the sample that is not conveyed in the fields on the login screen.	
Documents		
Select File	Use this option to navigate to the file location to upload the document into MAC on the sample record.	
Description	A free for text field to enter additional information about the document	

B. Sample Login Screen Fields for Certification Documents

For samples created to attach a certification, certified test report or certified mill analysis for the SMO review, the login screen is brief.

Field	Data	Comment
APL Product	Search field connected to the Approved Products List (APL).	
Intended Use	Free text field to describe the use of the product.	
Testing Lab	This is always defaulted to the SMO lab Id (DSM001) so the user does not need to select a lab.	
Contact Name	A free text field to enter the name of a person who can answer questions about the sample if questions arise.	It should be someone with enough knowledge about the sample and material requirements to answer questions from the laboratory receiving the sample.
Cell Phone #	A phone formatted field to enter the contact person's cell phone.	A phone formatted field means if the phone number is (555) 123-4567, enter 5551234567 and MAC will format it for you.
Office Phone #	A phone formatted field to enter the contact person's work phone.	Only one is required, office or cell. When you enter one, the other field is no longer designated as required.
Email	Enter the contact person's email address.	
Comment	A free form text field to enter additional information about the sample that is not conveyed in the fields on the login screen.	

Chapter 5 – Creating a New Sample from an Existing Sample

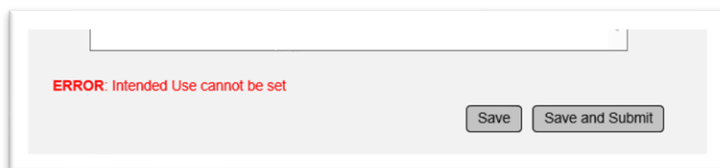
A feature in MAC is the ability to create a new sample from an existing sample. This can be used for any sample that your company has custody of and is especially helpful for samples like the resolution cylinders for structural concrete. QC Data Entry can use the QC sample to create the QR sample and VT Data Entry can use the VT sample to create the VR sample.

NOTE: Do **NOT** use this feature on **any** samples on an ERS project. The ERS project sample life cycle is abbreviated and many features are automated. By using this process, you will not be able to take advantage of the abbreviated sample life cycle and automation.

A. Issues with Creating a Sample from another Sample

Before you attempt to create a sample from another sample, there are a few things you need to be aware of when using this function.

1. You cannot create a sample from a sample that was not created by a user in your company.
2. Sometimes when you create a sample from a sample in a different MAC Spec category, type, sample purpose or sample level, you may receive an error message about not being able update certain fields.



This means that the original sample has a required field and the copied sample does not have the field. In this example, the original sample had Intended Use as a required field. The sample being created does not have the Intended Use field so MAC has no place to populate the required data. If you see this error message, you should create the new sample from a sample that is the same category / type or create the sample normally.

B. Creating a Sample from another Sample

NOTE: It is helpful to click on the Materials tab to expand it on the sample being copied if the new sample has the same MAC Spec as the copied sample. Do this before you perform the next steps.



1. On the sample you wish to copy from, select the Create New Sample Login from this Sample option.

A Create New Sample Login from this Sample dialog box will appear.

The screenshot shows a software interface with a 'Create New Sample Login from this Sample' dialog box. The dialog box has the following fields: 'Sample Category' (Project), 'Material/Specification' (346 - Portland Cement Concrete), 'MAC Spec' (346 - Portland Cement Concrete, Supplemental Specification, 01/2013, v2.10), 'Contract/Project' (T1552 / 406314-7-52-01. I-75 JACARANDA BLVD LAUREL), and 'Pay Items'. A 'Continue to Sample Information Screen' button is located at the bottom of the dialog box.

2. **Material/Specification** – because the header information for the new sample may be different, you will need to select the MAC Spec for the new sample.
3. Make any other changes as needed.
4. **Continue to Sample Information Screen** – select this option to get the appropriate sample login screen.

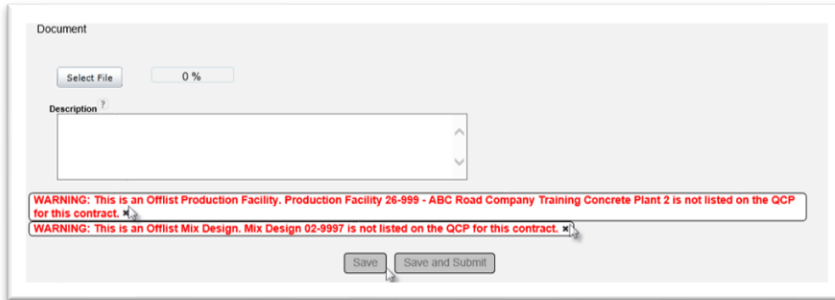
The Create New Sample Login from this Sample dialog box will expand. It will be populated with the Sample Info, Testing Lab, Location Info and Contact Info from the original sample.

The screenshot shows a 'Sample Info' form with the following fields: 'Method of Acceptance' (Sampling And Testing), 'Sample Level' (QC), 'Category' (Class II (3400 PSI) / Conventional), 'Structural Concrete Production Facility' (25-999 - ABC Road Company Training Co), 'Mix Design' (02-9997), 'Sampled By Tech' (Bran Stark [F12345678]), 'Date Sample Taken' (2/22/2017), 'FDOT Sample # (CC40001Q)' (CC20001Q), 'Quantity Represented' (50.00), 'Unit of Measure' (Cubic Yard(s)), 'Batch/Delivery Ticket #', 'LOT #' (1), and 'Testing Lab' (COABC1 - ABC Road Company).

5. Make changes to the sample information as needed. For example, if you are using the QC structural concrete sample to create the QR sample because the QC and VT did not compare and now Resolution samples need to be entered and tested:
 - a. Change the Sample level from QC to QR.
 - b. Change the FDOT Sample Number from CXX000XQ to CXX000XQR.
 - c. Change the Testing Lab from the QC lab to the Resolution lab.
 - d. . If the contact person needs to be updated, make those changes as well.

All other information (date sample taken, LOT number, Category / Type, Mix Design, Production Facility) should be the same on both samples.

Any warnings created by this data will be shown at the bottom of the dialog box.



The screenshot shows a 'Document' dialog box with the following elements:

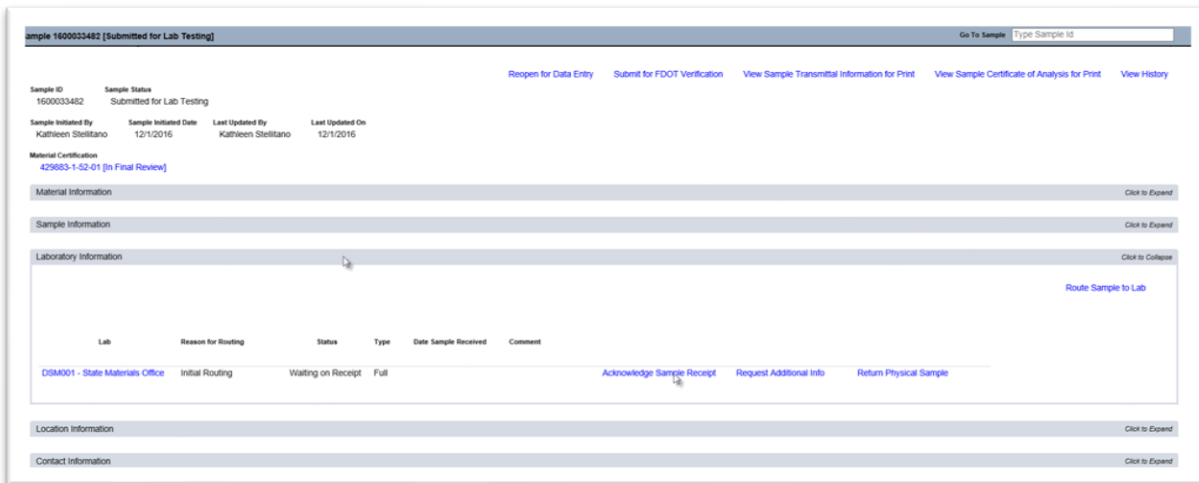
- A 'Select File' button and a progress indicator showing '0 %'.
- A 'Description' label above a text input field.
- Two warning messages in red text:
 - WARNING: This is an Offlist Production Facility. Production Facility 26-999 - ABC Road Company Training Concrete Plant 2 is not listed on the QCP for this contract. X
 - WARNING: This is an Offlist Mix Design. Mix Design 02-9997 is not listed on the QCP for this contract. X
- 'Save' and 'Save and Submit' buttons at the bottom.

6. Read the warning messages, then click on X on the warning messages to acknowledge them. You may need to make changes to the data if the warning message is due to a data entry error.
7. Select Save or Save and submit.

Chapter 6 – Sample Receipt

Laboratory samples that are not auto received must be received by a user in the company of the laboratory before test results can be entered. The sample can also be returned from the lab to the company of the person who created the sample, or it can be routed to another lab in the same company or a different company.


A. Sample Receipt



The screenshot shows a web application interface for sample management. At the top, there is a search bar labeled "Go To Sample" with a placeholder "Type Sample Id". Below this, there are several tabs: "Reopen for Data Entry", "Submit for FDOT Verification", "View Sample Transmittal Information for Print", "View Sample Certificate of Analysis for Print", and "View History". The main content area is divided into several sections: "Sample ID" (1600033482) and "Sample Status" (Submitted for Lab Testing); "Sample Initiated By" (Kathleen Stellitano), "Sample Initiated Date" (12/1/2016), "Last Updated By" (Kathleen Stellitano), and "Last Updated On" (12/1/2016); "Material Certification" (42983-1-02-01 [In Final Review]); "Material Information" (Click to Expand); "Sample Information" (Click to Expand); "Laboratory Information" (Click to Collapse), which is currently expanded to show a table with columns: Lab, Reason for Routing, Status, Type, Date Sample Received, and Comment. The table contains one row: "DSM001 - State Materials Office", "Initial Routing", "Waiting on Receipt", "Full", and "Date Sample Received" (empty). Below the table are three buttons: "Acknowledge Sample Receipt", "Request Additional Info", and "Return Physical Sample". At the bottom, there are "Location Information" (Click to Expand) and "Contact Information" (Click to Expand) sections.

1. On the sample screen of the sample you want to receive, click on the Laboratory Information tab to expand it.
2. Select the Acknowledge Sample Receipt option.

An Acknowledge Sample Receipt dialog box will appear.



The screenshot shows a dialog box titled "Acknowledge Sample Receipt". It has a close button in the top right corner. The dialog contains two input fields: "Date Received" with a red asterisk and a blue circle with the number 3 next to it, and "Comment" with a blue circle with the number 4 next to it. At the bottom of the dialog is a "Save" button with a mouse cursor hovering over it.

3. **Date Received** – enter the date the sample was received. The sample may have been physically received at the laboratory on a different date than when you acknowledge it in MAC. For example, it was dropped off on Friday after 5:00 PM and you do not get to acknowledge receipt until Monday after 8:00 AM. Enter Friday's date on the dialog box. MAC will assign a system date when you acknowledge the sample.

NOTE: Update the sample received date to the appropriate date if the sample is auto received and created on a different day than the sample was received.

4. **Comment** – enter any comments, if desired.
5. Select Save to designate the sample as received.

NOTE: The sample status is updated to Submitted for Lab Testing as soon as the person who created the sample submits it. The sample status remains as Submitted for Lab Testing until the Data Reviewer selects the Submit to FDOT for Verification. To determine if the sample has been received or not, you need to look at the Lab Status.

Sample has not yet been received by Lab:

Sample ID: 1600033482
 Sample Status: Submitted for Lab Testing

Sample Initiated By: Kathleen Stellitano
 Sample Initiated Date: 12/1/2016
 Last Updated By: Kathleen Stellitano
 Last Updated On: 12/1/2016

Material Certification: 429883-1-52-01 [In Final Review]

Material Information

Sample Information

Laboratory Information

Lab	Reason for Routing	Status	Type	Date Sample Received	Comment
DSM001 - State Materials Office	Initial Routing	Waiting on Receipt	Full		

[Acknowledge Sample Receipt](#) [Request Additional Info](#) [Return](#)

Sample has been received and is awaiting testing or is being tested.

Sample ID: 1600017694
 Sample Status: Submitted for Lab Testing

Sample Initiated By: Frederick Robinson
 Sample Initiated Date: 10/19/2016
 Last Updated By: Daniel Lorusso
 Last Updated On: 10/20/2016

Material Information

Sample Information

Laboratory Information

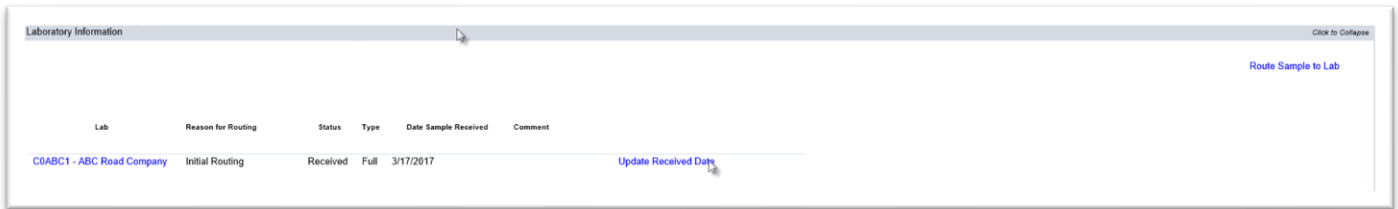
Lab	Reason for Routing	Status	Type	Date Sample Received	Comment
DSM001 - State Materials Office	Initial Routing	Received	Full	10/20/2016	

[Update Received Date](#)

Both have the status of Submitted for Lab Testing.

B. Updating the Received Date

If the received date is entered incorrectly, it can be revised if the sample has not been submitted to FDOT for Verification.



1. Click on the Laboratory Information tab to expand it.
2. Click on the Update Received Date option.

An Update Received Date dialog box will appear.



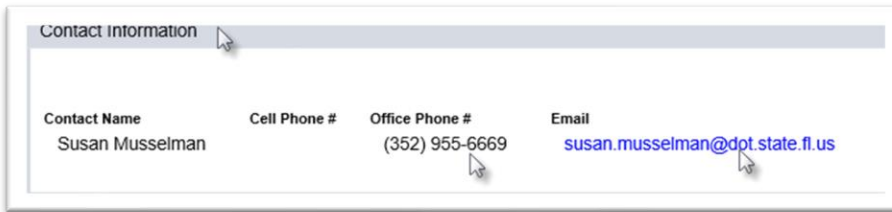
3. **Date Received** – enter the correct date or select it from the calendar feature.
4. Select the Save option to save the corrected date.

NOTE: For samples that are auto received, check the default date given by the system when the sample is created and update it to the appropriate date if the default is incorrect. This is essential for correct turnaround time reporting.

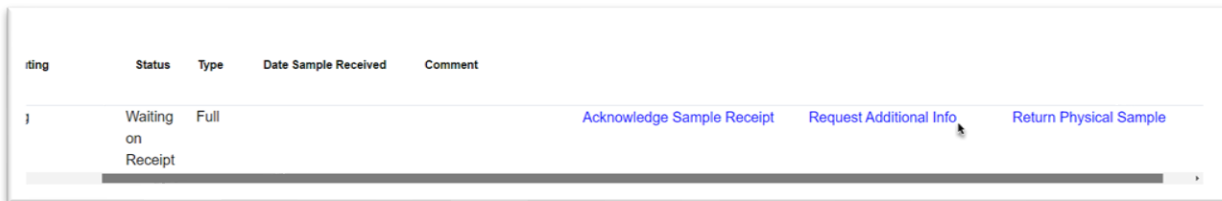
C. Request Additional Information (User in the company of a lab)

The lab personnel may have questions about the sample before they can begin testing. The Request Additional Information option allows the laboratory to put the sample life cycle on hold and request additional information from the company of the user who created the sample.

NOTE: In many cases, phoning or emailing the contact person will be sufficient. If you are not able to get the information from the contact person, the Request Additional Information option will allow you to designate on the sample that you need additional time to find the information needed to begin testing and stop the sample life cycle turnaround time for the laboratory.

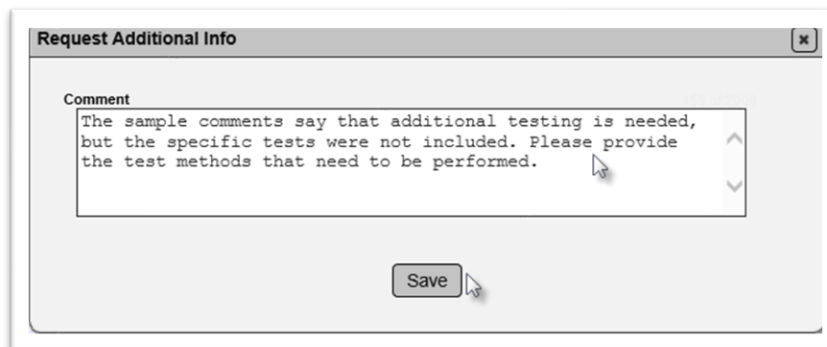


1. On the sample screen, you can find the contact person's information by selecting the Contact Information tab to expand it. Here you can see the name, email, and phone number of the contact person.



2. If you cannot get the information from the contact person and need to request additional information, click on the Laboratory Information tab to expand it.
3. Select the Request Additional Information tab.

A Request Additional Info dialog box will appear.

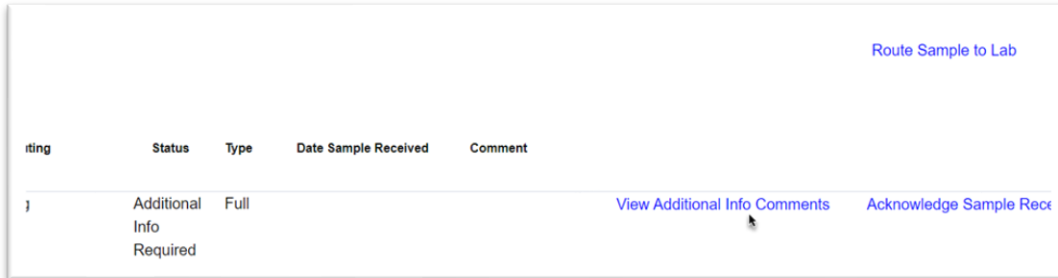


4. **Comment** – provide a comment describing the information needed to receive the sample and perform testing.
5. Select the Save option to set the laboratory status to Additional Info Required.

The sample status is set to Returned for Additional Information and will remain there until a user in the company of the user that created the sample responds to your request.

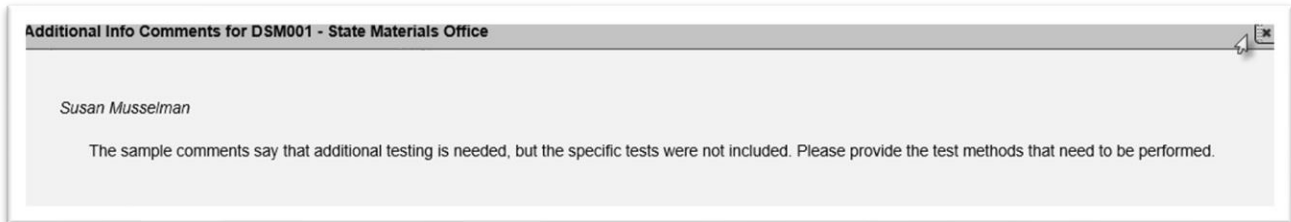
D. Respond to Additional Information Request (User in the company that created the sample)

If the laboratory returns a sample for additional information, any user in the company of the user who created the sample can respond.



1. On the sample screen of the returned sample, click on the Laboratory Information tab to expand it.
2. To see the lab's comments, select the View Additional Information Comments option.

An Additional Information Comments dialog box will appear.

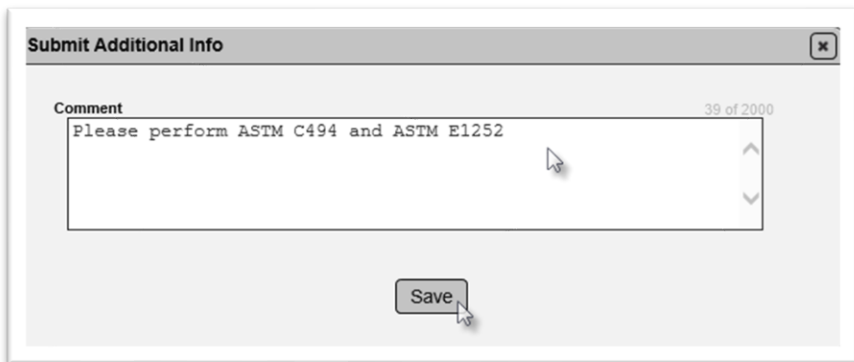


3. Read the request. You may need to contact the contact person for the lab shown on the Additional Comments dialog box for clarification.
4. To close the dialog box and return the sample screen to respond, select the X on the top right corner of the dialog box.



5. Click on the Submit Additional Info option to respond.

A Submit Additional Info dialog box will appear.



6. **Comment** – enter your response.
7. Select the Save option to submit your response.

The sample will be returned to the lab status of Waiting on Receipt.

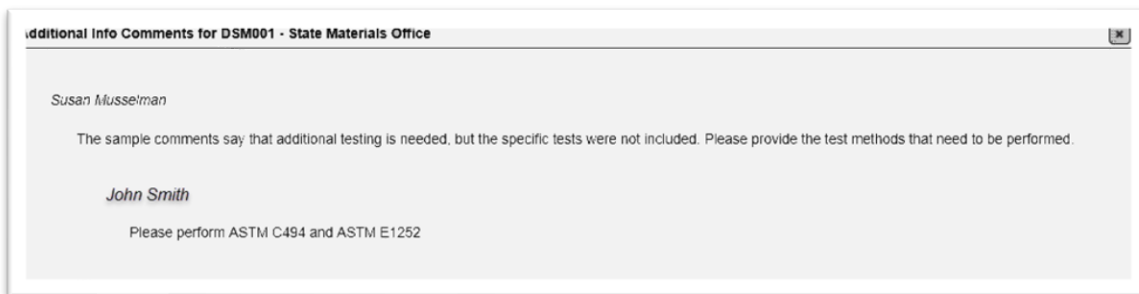
E. View Additional Info Comments (User in the company of a lab)

A user in the company of the lab can see the response for the Additional Information Request.

Status	Type	Date Sample Received	Comment
Waiting on Receipt	Full		View Additional Info Comments Acknowledge Sample Receipt

1. On the sample screen of the sample, select the Laboratory Information tab to expand it.
2. Select the View Additional Info Comments option.

An Additional Info Comments dialog box will appear with the original comment and the response.



At this point, you can receive the sample, make another request for additional information, or return the sample.

F. Returning the Physical Sample (User in the company of the lab)

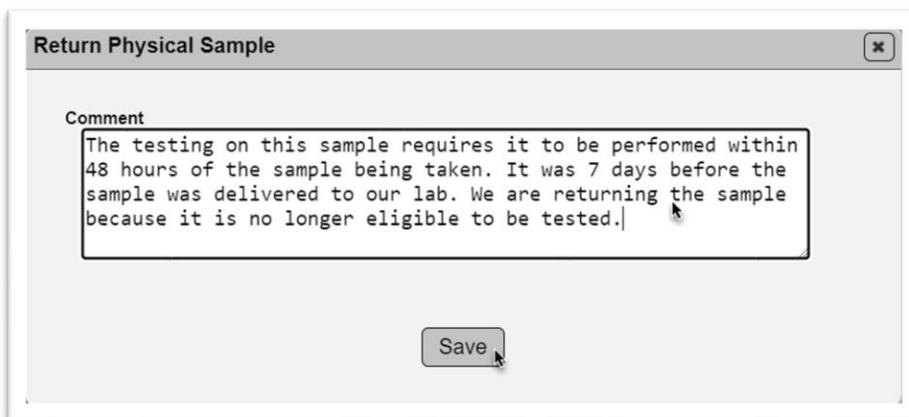
There may be cases where the physical sample is sent to the wrong laboratory and by the time it is discovered, it may be too late to route the sample to another laboratory. If you determine that a sample has been physically delivered to the incorrect laboratory, you can designate the sample as returned to the company of the user who created the sample. Ensure that the physical sample is returned to the company.

Status	Type	Date Sample Received	Comment
Waiting on Receipt	Full		

[View Additional Info Comments](#) [Acknowledge Sample Receipt](#) [Request Additional Info](#) [Return Physical Sample](#)

1. On the sample screen of the sample you wish to return, click on the Laboratory Information tab to expand it.
2. Click on the Return Physical sample option.

A Return Physical Sample dialog box will appear.



The dialog box titled "Return Physical Sample" contains a text area for a comment and a "Save" button. The comment text reads: "The testing on this sample requires it to be performed within 48 hours of the sample being taken. It was 7 days before the sample was delivered to our lab. We are returning the sample because it is no longer eligible to be tested."

3. **Comment** – enter the reason for returning the sample.
4. Select Save to designate the sample with a lab status of Returned.
5. Ensure that the physical sample is delivered to the company of the user that created the sample.

G. Addressing a Returned Sample (User in the company that created the sample)

A user in the company of the user who created the sample must deal with a sample with a lab status of returned. In most cases when a sample is physically returned to a company, the sample is no longer eligible for testing and must be deleted and a new sample collected (if possible). Contact your local DAC if you are unsure of what to do with a returned sample.

1. Resubmitting the Returned Sample

If a sample is returned to a company by mistake and there is still time left to send the sample back to the laboratory, the sample can be resubmitted.



Lab	Reason for Routing	Status	Type	Date Sample Received	Comment	
- State Materials Office	Initial Routing	Returned	Full		1	View Additional Info Comments Resubmit Sample

1. On the sample screen of the sample you want to return, select the Laboratory Information tab to expand it.
2. Select the Resubmit Sample option.

The sample will automatically be resubmitted to the laboratory on the sample and the lab status will be changed to Waiting on Receipt.

2. Routing the Returned Sample to a Different Lab

It is possible that a laboratory that cannot test a sample will decide to return it to the company that created it instead of routing it to a lab that can test it. When this is done, if time permits, the company that created the sample can route the sample to another lab as described in [H. Routing a Sample to Another Lab](#) below.

3. Deleting a Returned Sample

Sometimes when a sample is returned, it is no longer eligible to be tested. The sample must be deleted, and a new sample must be taken to replace the returned sample. Users in the company that created the sample cannot delete the sample. Contact the local DAC or a system administrator to have the sample deleted. If possible, have a new sample collected and log in the new sample to substitute for the returned, deleted sample.

H. Routing a Sample to Another Lab

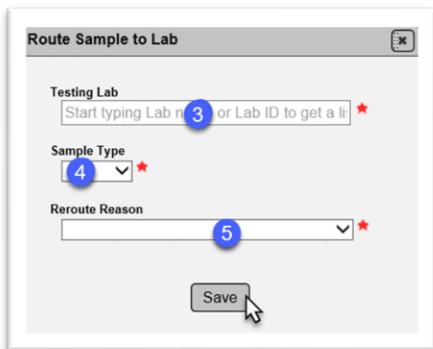
If the sample needs to be sent to another lab to perform all or some of the testing, a user in the company of the laboratory can route the sample to another lab. To route a sample to another lab, the sample must first be received at the original lab.



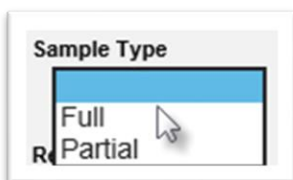
Lab	Reason for Routing	Status	Type	Date Sample Received	Comment	
DSM001 - State Materials Office	Initial Routing	Returned	Full		The testing on this sampl...	View Additional Info Comments Resubmit Sample Route Sample to Lab

1. On the sample screen of the sample you want to route to another lab, click on the Laboratory Information tab to expand it.
2. Click on the Route Sample to Lab option.

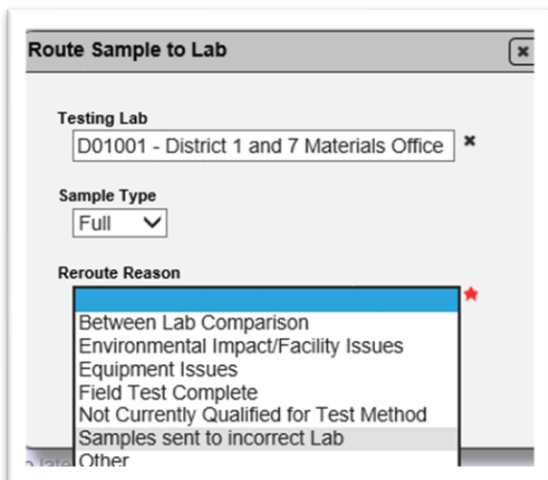
A Route Sample to Lab dialog box will appear.



3. **Testing Lab** – enter the Lab Id or Description of the lab you want to send the sample to in the Testing Lab field. Select the appropriate lab from the returned list.



4. **Sample Type** – select the Sample Route type.
- a. Select **Full** if the new lab will test the entire sample. In most cases for a returned sample, this is the appropriate selection.
 - b. Select **Partial** if the old lab will test part of the sample and the new lab will test part of the sample.



5. **Reroute Reason** – select the reason.
6. Select Save to reroute the sample.

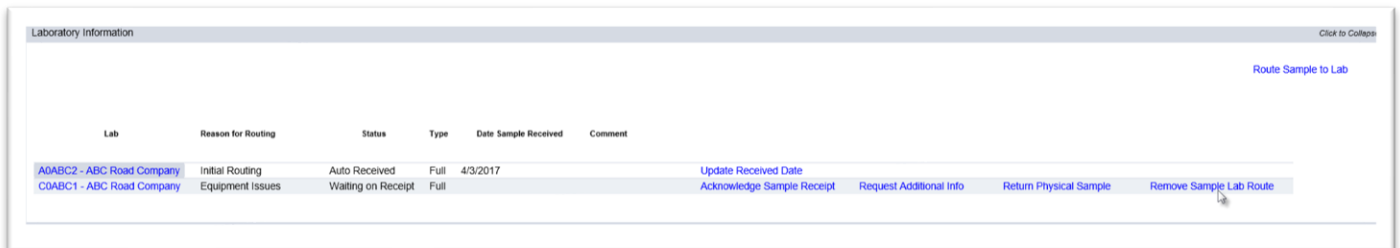
I. Receiving a Routed Sample

When a lab routes a sample to another lab, a user in the company of the lab that the sample is being routed to must acknowledge the sample has been received by the routed to lab.



1. On the sample screen of the sample you wish to receive, click on the Laboratory Information tab to expand it.
2. Select the Acknowledge Sample Receipt option to receive the sample in MAC.

J. Remove Routed Lab



If the sample was routed to your lab incorrectly, you can remove your lab as the routed lab id.

1. Select the Remove Sample Lab Route option.

A Remove Sample Lab Route dialog box will appear.



2. Select OK to remove your lab from the routing.

K. Sample Chain of Custody on a Full Reroute

When a lab selects Full Reroute, users in the original lab can still see the sample but cannot perform actions on the sample. The original lab does not have custody to enter test results or Submit the Sample to FDOT for Verification. The original lab on a sample that has sample type of Full cannot Acknowledge Receipt, Request Additional Information or Return the sample.

The original lab will not be allowed to enter test results.

Associated Tests [5]							
	Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required	Which test Rules?
ASTM C939 Flow of Grouts							
1	Initial Test	Lab			Ready for Testing	Optional	
ASTM C403 Time of Set							
2	Initial Test	Lab			Ready for Testing	Optional	
ASTM C940 Expansion and Bleed							
3	Initial Test	Lab			Ready for Testing	Optional	
ASTM C109 Compressive Strength Cubes (Cement)							
4	Initial Test	Lab			Ready for Testing	Optional	
FM 5-516 Chloride in Concrete							
5	Initial Test	Lab			Ready for Testing	Optional	

Showing 1 to 5 of 5

The rerouted laboratory must receive the routed sample for test result entry.

Associated Tests [5]							
	Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required	Which test Rules?
ASTM C939 Flow of Grouts							
1	Initial Test	Lab			Ready for Testing	Optional	Perform Test Mark Test Not Performed
ASTM C403 Time of Set							
2	Initial Test	Lab			Ready for Testing	Optional	Perform Test Mark Test Not Performed
ASTM C940 Expansion and Bleed							
3	Initial Test	Lab			Ready for Testing	Optional	Perform Test Mark Test Not Performed
ASTM C109 Compressive Strength Cubes (Cement)							
4	Initial Test	Lab			Ready for Testing	Optional	Perform Test Mark Test Not Performed
FM 5-516 Chloride in Concrete							
5	Initial Test	Lab			Ready for Testing	Optional	Perform Test Mark Test Not Performed

Showing 1 to 5 of 5

L. Sample Chain of Custody on a Partial Reroute

When the Sample Type of Partial is selected, MAC opens sample chain of custody to users in both companies of the laboratories. If both laboratories are in the same company, there is no obvious change for user access to sample life cycle chain of custody. If the laboratories are in different companies, any Data Entry user in either company can enter results on all tests. Any Data Reviewer in either company can submit the sample for FDOT Verification when the last test results are completed. MAC does not control sample chain of custody down to the specific test definition, rather both companies have full custody of the entire sample. The users in both companies **must** communicate with each other to ensure the Data Entry personnel and Data Reviewers are aware of which labs will perform which tests and when the sample is ready to be Submitted for FDOT Verification. The result entry for routed samples is covered in [Chapter 7 – Result Entry](#).

The rerouted laboratory must receive the routed sample to be able to access the test definitions for test result entry.

Chapter 7 – Result Entry

A. Result Entry for Samples that are not Rerouted at Sample Receipt

For a laboratory sample, any user with Data Entry or Data Reviewer in the company of the laboratory can perform the result entry. For a field sample, any user with Data Entry or Data Reviewer in the company that created the sample can perform the result entry

1. *Entering Results for a Single Test*

If you are entering results for just one of the tests on the sample, you can open a result entry screen for just that test.

Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required	Which test Rules?
ASTM C143 Slump of Hydraulic Cement Concrete	1	Initial Test	Field	Ready for Testing	Required	Perform Test Mark Test Not Performed
ASTM C173/ASTM C231 Air Content of Freshly Mixed Concrete	2	Initial Test	Field	Ready for Testing	Required	Perform Test Mark Test Not Performed
ASTM C1064 Temperature of Freshly Mixed Portland Cement Concrete	3	Initial Test	Field	Ready for Testing	Required	Perform Test Mark Test Not Performed

1. On the sample screen of the sample you want to enter test results on, click on the Associated Tests tab to expand it.
2. Click on the Perform Test option on the test you want to perform the result entry.

A Perform Test dialog box will appear. Each test has its own set of fields. The tests shown are for explaining the functionality for test result entry.

Perform Test

Test
ASTM C143 Slump of Hydraulic Cement Concrete

Tester
Type Technician Name TIN *

Date Test Performed *

Slump
Slump (in) *

Test Notes +

Save

3. **Tester** – all tests require that the Tester be identified. Not all tests require a qualified tester. Because the same field (Tester) is used when a test requires a qualified tester and when it does not, the field always reviews the CTQP database to determine if the name or TIN supplied has any qualifications first, even when a qualified tester is not required.

Sometimes on tests where a qualified tester is not required, the person who performed the test will not have a TIN so MAC will display a message, No Results Found, (from the CTQP database) and it will look like you cannot move forward.

The screenshot shows a window titled "Perform Test" with a close button (X) in the top right corner. The test name is "ASTM C143 Slump of Hydraulic Cement Concrete". Under the "Tester" label, there is a text input field containing "Bran Stark" with a small "x" icon to its right, and a dropdown menu below it showing "Bran Stark [F12345678]". To the right of the tester field is a "Date Test Performed" label and an empty date input field. Below the tester field is a "Slump (in)" label and an empty input field. At the bottom left, there is a "Test Notes +" label with a plus sign. At the bottom center, there is a "Save" button.

a. For tests requiring a qualified tester, enter the name or TIN of the tester. If a TIN is found, the tester can be selected from the returned list.

Later MAC will display if the tester is qualified for the specific qualification area of the technician. The test results can still be entered even if the technician is not qualified in the qualification area designated for the test. The unqualified tester will be flagged and an MC Review finding created.

The only time you will not be able to select a person for a test that requires a qualification area for the testing technician is if the tester is not qualified in any area (or does not have a TIN in CTQP). If that is the case, you will see that No Results Found. This is not an error message; however, you will not be allowed to proceed. The sample must be deleted, resampled (if needed) and retested (if possible) by a person with a TIN in the CTQP database. This does **NOT** mean that the person must be qualified in the qualification area required by the MAC Spec to get the test results in the system. If the person has a TIN in CTQP, the sample will accept the entry, then check to see if the person is qualified in the qualification area the MAC Spec requires on the date the test was performed. If the person is not qualified in the appropriate qualification area, the test will be flagged with an unqualified TIN flag.

The screenshot shows a window titled "Perform Test" with a close button (X) in the top right corner. The test name is "ASTM C143 Slump of Hydraulic Cement Concrete". Under the "Tester" label, there is a text input field containing "Susan Burnett" with a small "x" icon to its right, and a dropdown menu below it showing "No Results Found". To the right of the tester field is a "Date Test Performed" label and an empty date input field. Below the tester field is a "Slump" label and an empty input field.

b. For tests not requiring a qualified tester – enter the name of the tester. If a TIN is found, the tester can be selected from the returned list. If the technician is not found in CTQP, it will appear as is shown in the screenshot above, but MAC will allow you to proceed. Simply select the tab key to move to the Date Test Performed field or click in the Date Test Performed field and MAC will populate the Tester field with the name you supplied in the Tester field.

Perform Test

Test
SM 4110 B Anions in Water by IC

Tester
Susan Burnett

Testing Lab
DSM001 - State Materials Office

Date Test Performed
October 2016

Chloride (ppm)
82.034

4. **Date Test Performed** – enter the date the test was performed.

NOTE: Check the date test performed to ensure that it is correct.

5. **Test Results** – enter test results in the test results fields. Each test will have different fields. Some dynamic field selections will cause other fields to appear.

6. **Test Notes** – if there are notes about the specific test, click on the + option next to the test notes label to open a dialog box to enter the notes.

7. Select the Save option.

NOTE: On some tests if you enter failing results, it will display a warning message that the results do not meet the test limits from the MAC Spec, mix design or product. This warning is intended to draw attention to the entry in case there is a data entry error. If the result obtained did fail, do not change the result from a failing result to a passing result.

6.50

Does not meet target/limit [Slump = 3 +/- 1.5]

The test entry on the Associated Tests tab will be updated to a test status of Test Complete. If a qualified technician is required and the technician selected is not qualified in the qualification area required to perform the test, the tester Field will appear in bold red font with an asterisk. If the test results are not within the MAC Spec, mix design or product limits, the Test Disposition will show as Fail in bold red font with an asterisk.

	Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required	Which test Rules?
ASTM C143 Slump of Hydraulic Cement Concrete							
1	Initial Test	Field	F12345678 *	Fail *	Test Complete	Required	Perform Test Mark Test Not Performed

If it is a lab test and the lab performing the test is not qualified in the required test method, the Lab Id will show in bold red font with an asterisk.

	Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required	Which test Rules?
ASTM C39 Compressive Strength							
5	Initial Test	Lab	C0ABC2*	W30028468	Pass	Test Complete	Required View

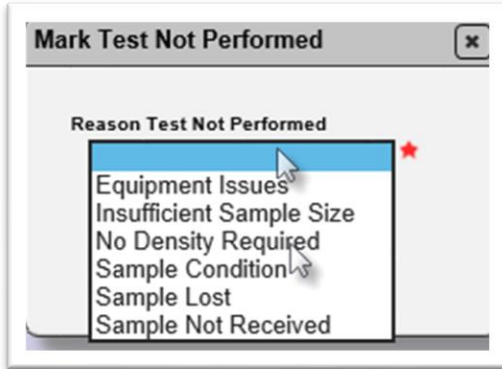
2. Designating a Required Test as Not Performed

Required tests must be performed or designated as not performed.

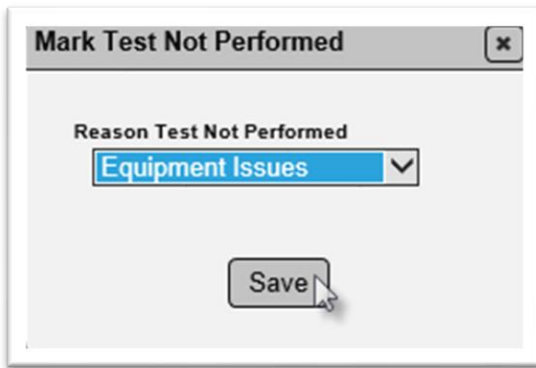
ASTM C1064 Temperature of Freshly Mixed Portland Cement Concrete						
3	Initial Test	Field		Ready for Testing	Required	Perform Test Mark Test Not Performed

1. On the test that was not performed, select the Mark Test Not Performed option.

A Mark Test Not Performed dialog box will appear.



2. Reason Test Not Performed – select the reason the test was not performed from the dropdown list.



3. Select Save to save the reason and designate the test as not performed.

The test disposition will be set to Fail but will not be in bold red font. The test status will be set to Test Not Performed and the reason will display with the test status in bold red font with an asterisk. When a required test is designated as not performed, an automatic finding is generated on the MC Review of the FPN(s) on the sample.

PDSOCHIBBO ESSB (3)							
	Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required	Which test Rules?
ASTM C143 Slump of Hydraulic Cement Concrete							
1	Initial Test	Field	F12345678 *	Fail *	Test Complete	Required	Perform Test Mark Test Not Performed
ASTM C173/ASTM C231 Air Content of Freshly Mixed Concrete							
2	Initial Test	Field		Fail	Test Not Performed [Equipment Issues] *	Required	Perform Test Mark Test Not Performed

3. *Optional Tests*

Most project samples will not have optional tests. In most cases only certain sample levels, like IV or RT have tests set as optional. If a sample has tests that are designated as optional, you do not have to fill in the test or delete the test from the sample to be able to Submit the Sample to FDOT for Verification. Leave any optional tests not performed blank. Many users like to Remove the test from the sample so that it does not look like the test was missed. You can do this if you wish. Either choice is permissible for optional tests.

4. *Adding Tests*

Most project samples will not allow you to add tests. The MAC Specs have been designed to list all required testing. Tests are usually not allowed to be added because the material method of acceptance does not need the testing to be performed to ensure that the material is acceptable. If you wish to submit a sample with tests other than testing required for acceptance, contact the SMO technical unit responsible for the sampling and testing of the material for further assistance.

5. *Special Tests*

A few MAC Specs have special tests assigned, but most project MAC Specs do not. If you are working on a MAC Spec with special tests, you will see the Add Test option. When you select the Add Test option, the only selection you will be able to make is any special test(s) assigned on the MAC Spec.

6. *Entering Results for Multiple Tests*

If there is more than one test on the sample, you will have the ability to enter the test results for any or all the tests at one time. They do not have to be entered individually as described in [1. Entering Results for a Single Test](#).



1. Click on the Associated Tests tab to expand it.
2. Click on the Perform Multiple Tests option.

A Perform Multiple Tests dialog box will appear.

3. **Tests to Perform** – all available tests will appear as selected. If you don't want to enter any or some of these tests now, deselect the test. It will not delete the test from the sample. It will merely take the test definition entry off the dialog box for result entry now.

NOTE: It is *crucial* that you deselect any tests not being performed at this time. If you do not, MAC will populate the test header and update the test status to In Progress resulting in incorrect turnaround times.

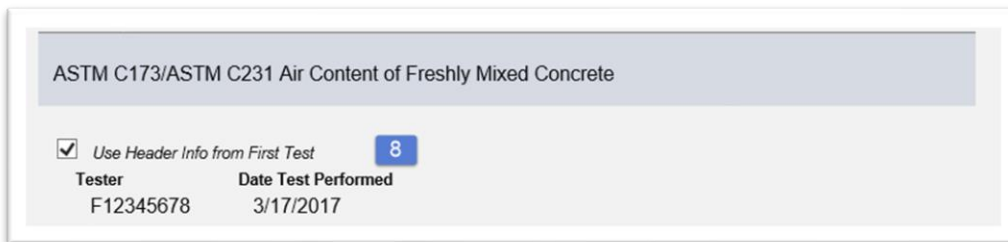
4. **Tester** – on the first test, enter the name or TIN of the tester in the Tester field. As described in the instructions for a single test entry, this field may or may not require a qualified technician.

5. **Date Test Performed** – enter the date the test was performed in the Date Test Performed field.

6. **Test Results** – enter test results in the test results fields. Each test will have different fields. Some dynamic field selections will cause other fields to appear.

7. **Test Notes** – enter any testing comments in the Test Notes option by selecting the + Next to the Test Notes. A text box will appear for you to enter test comments.

This completes entry for the first test. On the rest of the tests you have the option to indicate if the same tester and date was used or a different tester on a different date.

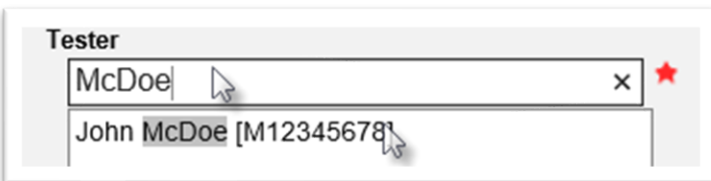


8. User Header Info From First Test – once the first test is complete, the Use Header Info from First Test indicator defaults to checked and populates the TIN or name for the Tester and date test performed on all the other selected tests. If a different tester was used or if the test was performed on a different date (or both), deselect this indicator.

Once it is deselected, the fields appear with the information still populated.



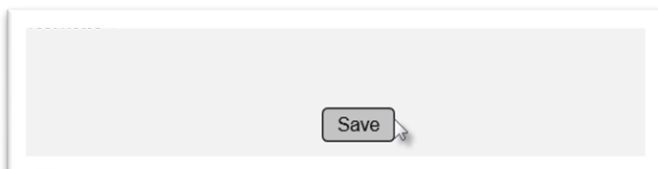
a. To change the Tester, select the x next to the Tester field to clear the field.



Enter the new name or TIN and select it from the returned list.

b. To change the Date Test performed, click in the field to revise the date manually or select the new date from the calendar feature.

9. Continue completing all tests.



10. Select the Save option to save all tests results entered.

The tests statuses on the tests with the saved results will be updated to Test Complete.

B. Performing a Retest

For most project samples, retest is not a valid option. If you believe a test is available for a retest, contact your local DAC or the appropriate SMO technical unit before you perform the retest. If you do need to retest, the appropriate DMRO or SMO personnel will assist you with documenting the retest results.

C. Result Entry for Samples that are Rerouted at Sample Receipt

When a sample is rerouted at Sample and it is a partial reroute, the result entry is slightly different. Users from the company for each laboratory will need to communicate which laboratory is performing which test definitions. Also both labs need to determine who will submit the sample to FDOT for Verification.

Associated Tests [6]							Click to Collapse
	Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required	Which test Rules?
FM 5-963 Asphalt Content by Ignition Oven							
1	Initial Test	Lab			Ready for Testing	Required	Perform Test Mark Test Not Performed
FM 1-T 030 Superpave Gradation							
2	Initial Test	Lab			Ready for Testing	Required	Perform Test Mark Test Not Performed
FM 1-T 209 Maximum Specific Gravity							
3	Initial Test	Lab			Ready for Testing	Required	Perform Test Mark Test Not Performed
FM 1-T 166 Gmb - Plant							
4	Initial Test	Lab			Ready for Testing	Required	Perform Test Mark Test Not Performed
FM 1-T 166 Gmb - Roadway							
5	Initial Test	Lab			Ready for Testing	Required	Perform Test Mark Test Not Performed
Asphalt Volumetrics							
6	Initial Test	Lab			Ready for Testing	Required	Perform Test Mark Test Not Performed

Showing 1 to 6 of 6

1. On the sample screen of the sample you wish to enter results for, click on the Associated Tests tab to expand it. By now you should have communicated with the original lab to determine which lab will perform which tests. MAC does not restrict either lab to any test. Both labs are able to access and perform result entry on all tests.
2. You may select Perform Test to enter the results for one test or select Perform Multiple Tests if your lab is going to perform more than one test.

A Perform Test dialog box or Perform Multiple Tests dialog box will appear. The result entry is the same for a sample that is not routed with one exception, the Testing Lab must now be identified.

Field	Value	Unit	Calculation
Basket Weight (g)			A
Beginning Basket + Sample Weight (g)			B
Begin Sample Weight (g)			B - A
End Basket + Sample Weight (g)			C
Final Sample Weight (g)			D = C - A
Asphalt Content from Print Out (%)			E
Calibration Factor (%)	0.04		F
Design Asphalt Content (%)	5.2		
Percent Asphalt Content (%)			E + F
Extracted Aggregate Weight (g)			G
Percent Difference Between Final Sample Weight and Extracted Aggregate Weight (%)			(D - G) ÷ D * 100
Washed Sample Weight (g)			H
Weight of Minus 200 by Wash (g)			I = G - H

3. **Testing Lab** – select the appropriate lab from the Testing Lab drop down list. The list is restricted to the original lab and the routed to lab(s). The rest of the result entry is the same as an unrouted sample.

NOTE: The users in each laboratory must communicate to determine when the testing is complete and which company will perform the data review and submit the sample to FDOT for Verification. This cannot be done until all required tests are performed or designated as Test not Performed.

Chapter 8 – Viewing the Sample History

The system tracks the data changes made to sample and test data in the sample history along with the user who made the changes.

Sample 1700063963 [Submitted for Lab Testing] Go To Sample

[Create New Sample Login from this Sample](#) [View Sample Transmittal Information for Print](#) [View Sample Certificate of Analysis for Print](#) [View History](#)

Sample ID	Sample Status
1700063963	Submitted for Lab Testing

Sample Initiated By	Sample Initiated Date	Last Updated By	Last Updated On
Susan Musselman	3/17/2017	Susan Musselman	3/17/2017

1. On the sample screen, select the View History option.

A View History dialog box will appear.

View History

Field	Old Value	New Value
ASTM C173/ASTM C231 Air Content of Freshly Mixed Concrete Updated by Susan Musselman on 3/17/2017 3:02:24 PM		
Tester		F12345678
Specimen Count		1
Date Test Performed		3/17/2017
Reason Test Not Performed	Equipment Issues	
Test Passes for Primary Category	No	Yes
Test Complete	No	Yes
ASTM C1064 Temperature of Freshly Mixed Portland Cement Concrete Updated by Susan Musselman on 3/17/2017 3:02:24 PM		
Tester		F12345678
Specimen Count		1
Date Test Performed		3/17/2017
Test Passes for Primary Category		Yes
Test Complete	No	Yes
FM 5-501 - Early Sampling for W/CM Ratio Updated by Susan Musselman on 3/17/2017 3:02:24 PM		
Tester		F12345678
Specimen Count		1
Date Test Performed		3/17/2017
Test Passes for Primary Category		No
Test Complete	No	Yes
ASTM C173/ASTM C231 Air Content of Freshly Mixed Concrete Updated by Susan Musselman on 3/17/2017 2:23:24 PM		
Reason Test Not Performed	Equipment Issues	

Showing 1 to 30 of 30 [Export Results](#)

2. Use the scroll bar to view the entire file.

3. Export the results if you wish to save the history in a file.

4. To close the dialog box, select the X on the top right corner of the box.

Chapter 9 – Opening a Sample for Updates before the Sample is Submitted for FDOT Verification

A. Reopening a Sample for Sample Data Entry during Sample Life Cycle (PA, District Application Coordinator, System Administrator)

Sometimes during the life of the sample, before the Data Reviewer has submitted the sample to FDOT for Verification, a user may notice that there is something wrong in the Sample Info that needs to be updated.

The PA or DAC can open the Sample Info tab while the sample is being tested to allow a user in the company that created the sample to update the information. On a lab sample, this takes it out of the custody of company of the lab temporarily and returns it to the company of the user who created the sample. The test result entry is locked down until the sample header is fixed and the sample is returned, even the same company created the sample. This is normally done for items that impact the result entry and determination of pass / fail. An example of a reason to send the sample back during sample life cycle and not wait until the finalization is the wrong structural concrete mix design has been entered and someone notices that the w/cm ratio result is failing because of this.



1. On the sample screen, select the Reopen for Data Entry option.

A Reopen for Data Entry dialog box will appear.



2. Select the Reopen for Data Entry option.

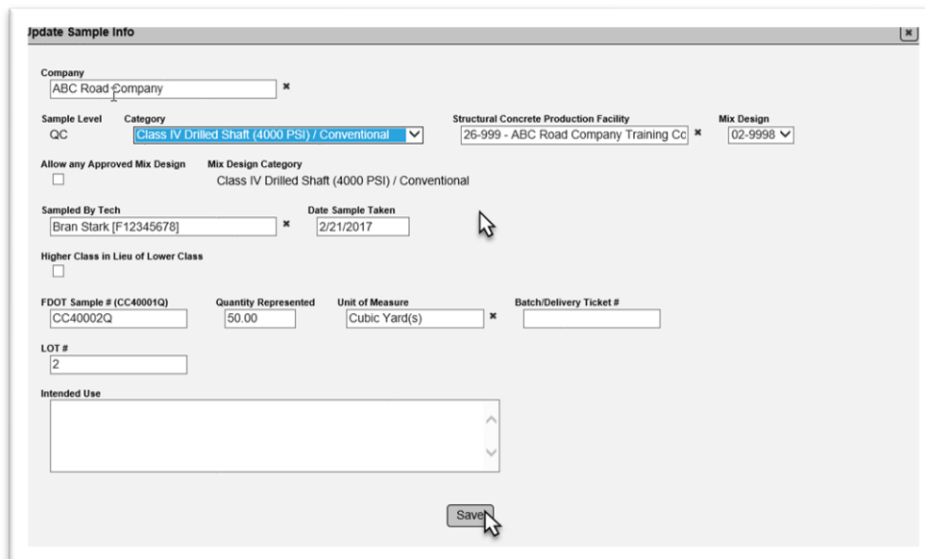
The sample status is updated from Submitted for Lab Testing to Logged. The laboratory temporarily loses access to the sample until the updates are made and the sample is returned to the laboratory.

B. Making Sample Data Corrections (Data Reviewer)



1. On the sample screen of the sample that needs to be corrected, click on the Sample Info tab to expand it.
2. Click on the Update Sample Info option.

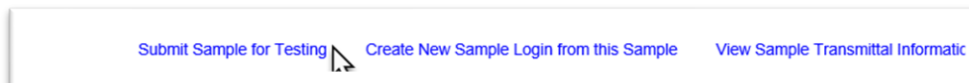
An Update Sample Info dialog box will appear.



3. Make changes to the information as needed.
4. Select the Save option to save the changes.

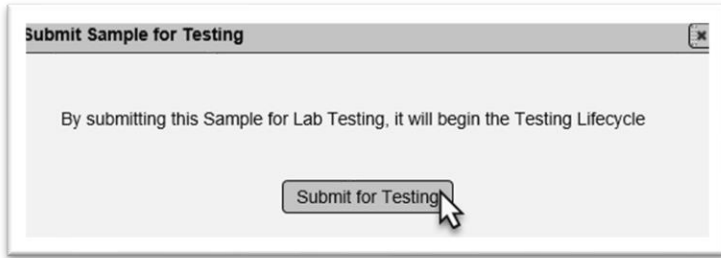
NOTE: The Category Type is available for selection. This should not be changed. See Chapter 10 Section [B. What Should Not Be Changed on a Sample](#) for additional information.

To indicate to the laboratory that your changes are complete, you must resubmit the sample for lab testing.



5. Select the Submit Sample for Testing option.

A Submit Sample for Testing dialog box will appear.



6. Select the Submit for Testing option.

NOTE: This same functionality can (and normally does) occur after the sample has been submitted to FDOT for Verification. The reason this can be done in both places is that sometimes the change may impact testing, so it is better to make the change before the test results are entered or before the sample is submitted to FDOT for Verification.

Chapter 10 – Sample and Test Data Review and Submitting Samples for FDOT Verification

Samples must be reviewed by a user in the company who has custody of the sample to ensure the sample has been confirmed and is ready to be used by FDOT for acceptance. The functions in this chapter are performed by a user with the company role of Data Reviewer. **The act of submitting the sample to FDOT indicates that the company has performed a thorough review of the data and made any needed changes or commented on any information the Data Reviewer cannot update.**

A. Reviewing the Sample Header Data

If a user in a different company created the sample, the Data Reviewer will not be able to update the sample information. The Data Reviewer can review the sample header information and make note of any obvious errors in the comments section ([Chapter 11 – Sample Comments](#)).

B. What Should Not Be Changed on a Sample

MAC will allow you to change key fields on a sample, but it does not work. If the new selection has required tests that the old selection did not and vice versa, the sample may or may not get the correct list of tests or targets and limits. The only way to ensure this happens is to delete the sample with the incorrect key fields and reenter it with the correct information.

- Contract/Project
- MAC Spec
- Category
- Type
- Sample Purpose
- Sample Level
- Anything that identifies to MAC what the sample is and what tests to assign

If you are not sure if a field is a MAC key field, contact your local DAC.

C. Reviewing the Test Data

The Data Reviewer should review the test results on all tests to ensure they are correct and complete.

- Are all the sample dates correct?
- Are all tests correct?
- Are all required tests completed or marked not performed with an indicator as to why the required test was not performed?
- Are there test notes or sample comments to explain any unusual occurrences?
- Are there any potential issues designated with bold red font?
 - If so, are they due to data entry errors?
 - If it is not a data entry error, are there comments to address the finding?

If the review shows that there are errors, the Data Reviewer should make any needed changes before submitting the Sample to FDOT for Verification.

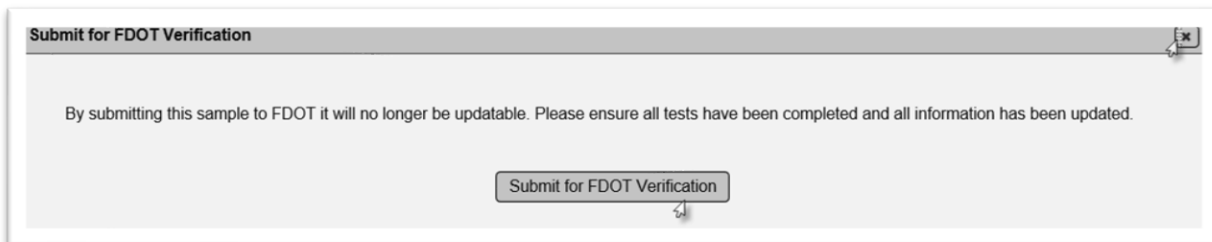
D. Submitting the Sample to FDOT for Verification

When the Data Reviewer is satisfied that the results are correct, the sample can be submitted to FDOT for Verification.



1. On the sample screen, select the Submit for FDOT Verification option.

A Submit for FDOT Verification dialog box will appear with a warning that selecting the Submit for FDOT Verification will indicate that the sample is ready to be finalized. Once the Submit for FDOT Verification option is selected, you will no longer be able to update the test results. This message is a reminder that the next stage of the sample life cycle is the PA's review and **you are indicating that your company has reviewed the sample and it is ready for finalization and comparison packages.**



- a. If you are not sure the sample is ready, select the x on the top right corner of the dialog box to dismiss it and return the sample screen for more checking.
- b. If you are satisfied that the sample is ready to be finalized, select the Submit for FDOT Verification option.

The sample status will be updated to Pending Finalization if the sample is not auto finalized and to Finalized if the sample is auto finalized.

NOTE: The Data Reviewer for the company of the laboratory cannot submit a structural concrete sample for FDOT Verification if the company that created the sample has not entered the plastic property test results on structural concrete samples. All required tests must be completed or designated as Not Performed for the Submit to FDOT Verification option to appear.

Chapter 11 – Sample Comments

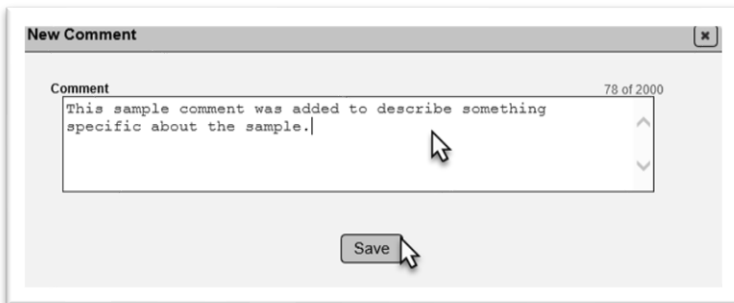
Sample comments can be added during the life of the sample while your company has custody of the sample.

A. Adding a Comment to the Sample



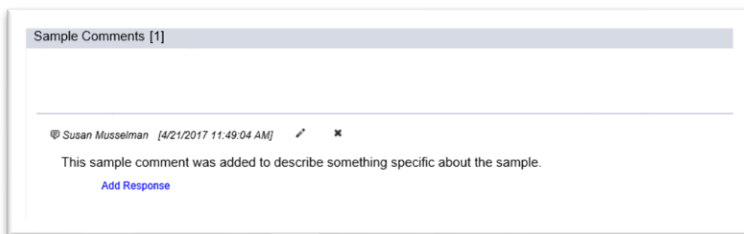
1. Click on the Comments tab to expand it.
2. Click on the New Comment option.

A New Comment dialog box will appear.



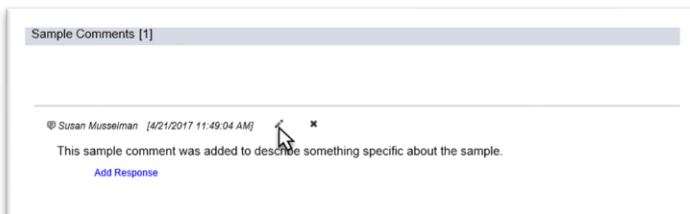
3. Enter your comment in the Comment field.
4. Select the Save option.

The Comments tab will be updated to include the comment.



B. Updating a Comment on the Sample

To update a comment, you previously entered:



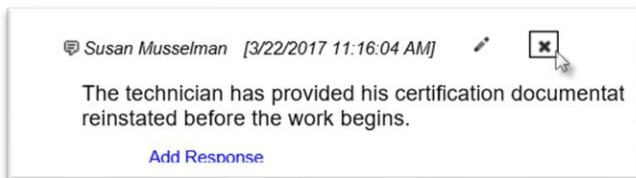
1. Select the Update Comment icon ().

An Update Comment dialog box will appear.



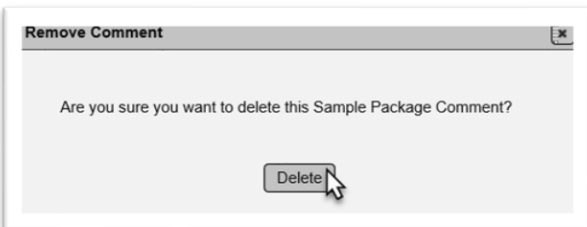
2. Make changes to the comment as desired.
3. Select the Update option to save the changes.

C. Deleting a Comment on the Sample



1. Select the Remove Comment icon (x).

A Remove Comment dialog box will appear.



2. Select the Delete option. If you inadvertently selected the Remove Comment icon and don't want to delete it, select the x on the top of the dialog box to dismiss it.

D. Responding to Another's Comment

If someone else makes a comment, you can respond to the comment.



1. Select the Add Response option.

An Add Response dialog box will appear.



2. Enter your response in the text field.
3. Select the Save option to save the response.

The response will appear under the comment.



Once a response has been made to a comment, the comment cannot be updated or deleted until the response is deleted.

E. Updating a Response

To update a response you previously entered:



1. Select the Update Response icon ().

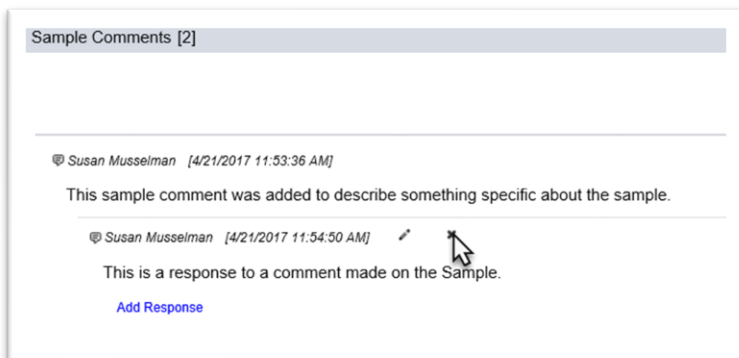
An Update Response dialog box will appear.



2. Make changes to the response as desired.
3. Select the Update option to save the changes.

F. Deleting a Response

1. Select the Remove Response icon (x).



A Remove Response dialog box will appear.



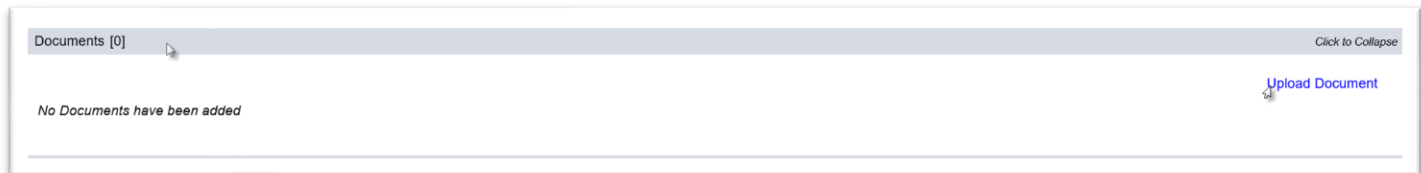
2. Select the Delete option. If you inadvertently selected the Remove Comment icon and don't want to delete it, select the x on the top of the dialog box to dismiss it.

Chapter 12 – Sample Documents

There are times when a document needs to be attached to the sample. You can do this when the sample is created or at any time during the sample life cycle if your company has custody of the sample. Once the sample leaves your company's custody, you will not be able to attach a document.

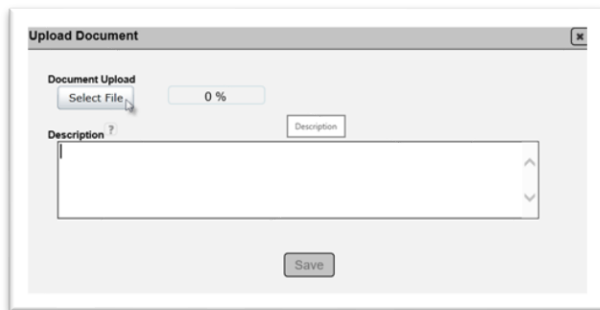
NOTE: Do **NOT** attach mix design reports to samples in MAC. If you are instructed by Department personnel to do so, contact a system administrator.

A. Adding a Document to the Sample



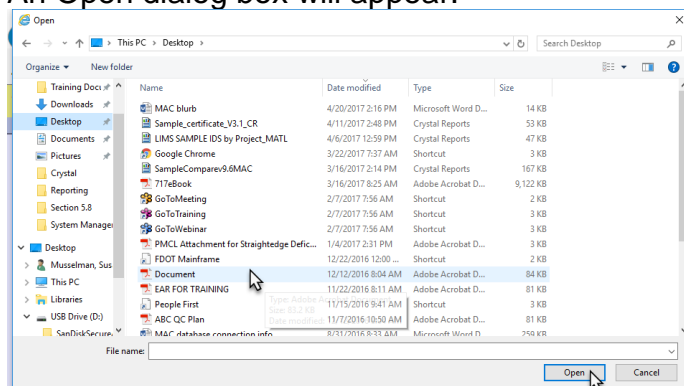
1. Click on the Documents tab to expand it.
2. Select the Upload Document option.

An Upload Document dialog box will appear.



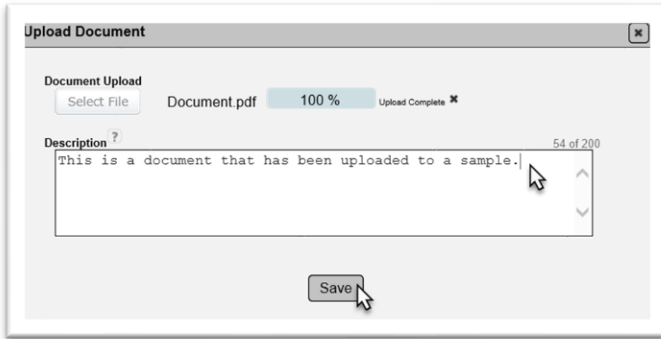
3. Click on the Select File option to navigate to the file you want to upload.

An Open dialog box will appear.



4. Navigate to the location of the file.
5. Select the file to be uploaded.
6. Select the Open option.

The Upload dialog box will reappear indicating that the file upload is complete, 100%.

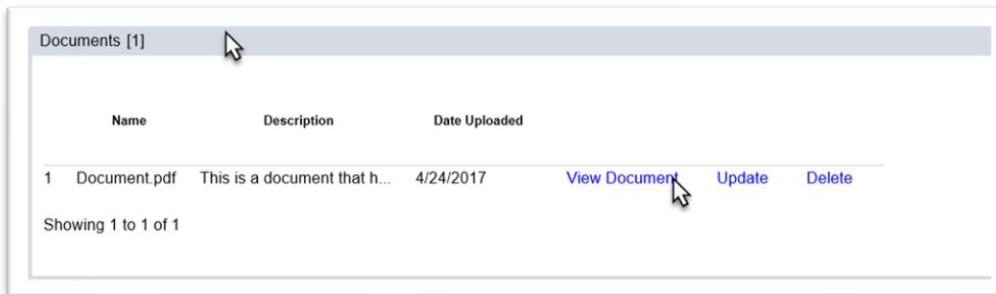


7. Enter a document description, if desired.
8. Select the Save option to complete the upload.

NOTE: If you discover that you selected the wrong document in step 5, click on the X next to the Upload Complete message to delete the document and start over.

B. Viewing Uploaded Documents

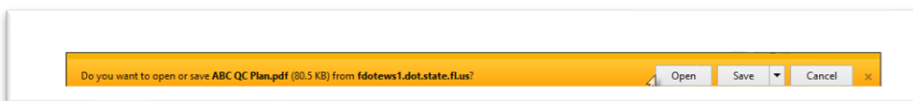
Anyone can view documents uploaded to a sample. To view the uploaded documents:



1. Click on the Documents tab to expand it.
2. Click on the View Document option.

The document will be downloaded in the file format it was stored. You will need an application compatible with that format to be able to view the document. The example document is a pdf file. You would need an application like Adobe Reader or Nuance to view the file.

A download dialog box will appear. The appearance of the dialog box is a function of the browser you are using.

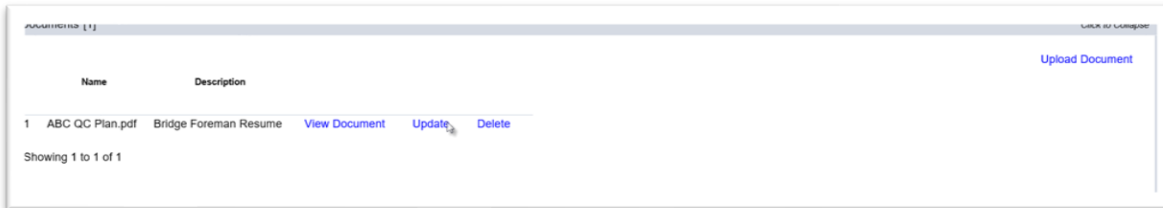


3. Select the Open option to open the file.

The document will be opened by the application applicable to the file type.

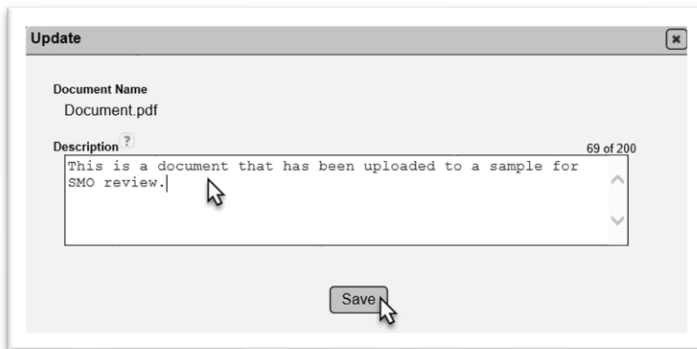
C. Updating a Document Description

If you find that you have entered the document description incorrectly, you can revise it.



1. Click on the Update option.

An Update dialog box will appear.

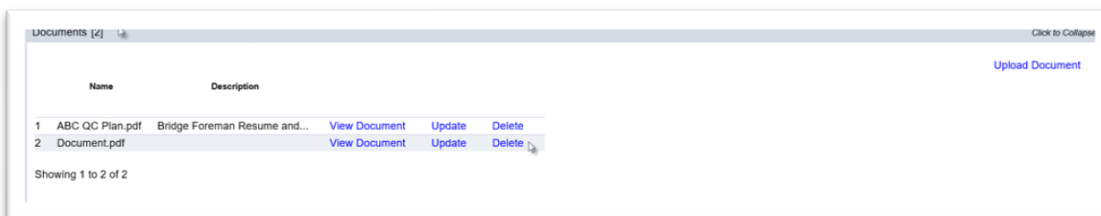


2. Revise the description, as needed.

3. Select the Save option to save the changes to the description.

D. Deleting an Uploaded Document

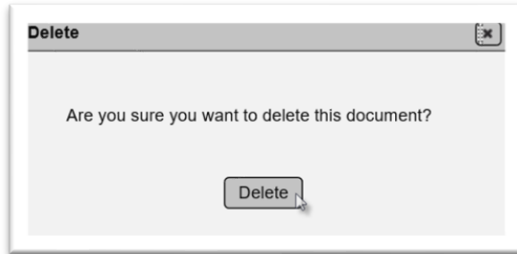
If you need to delete a document, you can if you have the appropriate role(s). This option will not be available to some users.



1. Click on the Documents tab to expand it.

2. Select the Delete option on the row of the document you want to delete.

A Delete dialog box will appear.



3. Select the Delete option to delete the document. If you inadvertently selected the Delete option and don't want to delete it, select the x on the top of the dialog box to dismiss it.

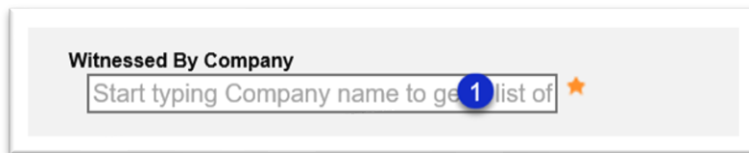
Chapter 13 – Witnessed By Samples

A. What is a Witnessed By Sample?

There are some QC samples that do not have a corresponding VT sample. Instead the Verification Technician witnesses QC perform the test and record the data. For samples like this, the MAC Spec that governs the sample has an indicator that the sample is eligible for the Witnessed By Company field on the sample login screen. When the test is complete, the Data Reviewers in the company listed as the Witnessed By Company receive a notification that the sample is awaiting the VT Technician's TIN. When a Data Reviewer enters the TIN, the Data Reviewers for the QC Company are notified that the sample has the TIN updated and can be submitted to FDOT for Verification.

NOTE: Data Reviewers for QC Company and VT Witnessed By Company should ensure they have notifications set up and filtered so they receive these notifications. The notifications are intended to ensure the sample is processed in a timely manner and not waiting for the VT company enter the TIN or the QC company to submit the sample to FDOT. See the [Basic Notifications and Dashboard](#) instructions for opting in and applying filters and the [Company Notifications - Data Reviewers](#) instructions.

B. QC Data Entry for a Witnessed By Sample



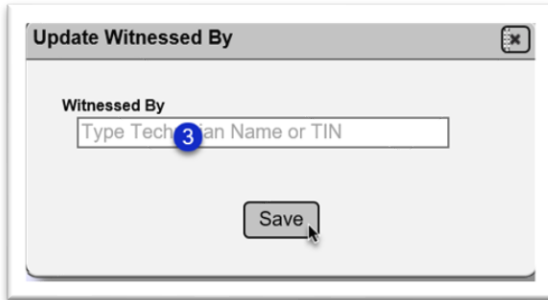
1. **Witnessed By Company** – enter the company name of the technician who witnessed the QC Sample. It must be a company with a MAC company profile. Select the company from the returned list.

C. VT Data Entry for a Witnessed By Sample



1. Click on the Sample Information tab to expand it.
2. To enter the VT's TIN, click on the Update Witnessed By pencil icon.

An Update Witnessed By dialog box will appear.



The image shows a dialog box titled "Update Witnessed By". Inside the dialog, there is a label "Witnessed By" above a text input field. The input field contains the placeholder text "Type Technician Name or TIN". A blue circle with the number "3" is placed over the input field. Below the input field is a "Save" button.

3. **Witnessed By** – enter the name or TIN of the VT technician and select the technician from the returned list.

4. Select the Save option.

Chapter 14 – Deleting a Sample

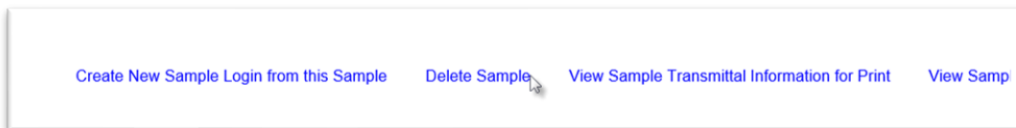
Users can delete samples up until the time the sample is received by the lab for lab samples or submitted to FDOT for Verification for field samples. Once a sample has been received or submitted, only a DAC or system administrator can delete the sample.

PAs cannot delete samples. The PA is a system role that has access to samples across multiple companies. Once a sample has left the custody of the company only a DAC or system administrators can delete it.

If you discover that a sample has been entered with incorrect key fields:

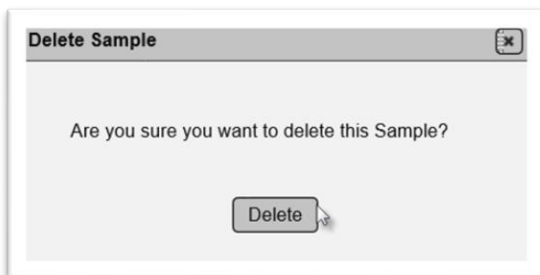
- Contract
- MAC Spec
- Category
- Type
- Sample Purpose
- Sample Level
- Anything that identifies to MAC what the sample is and what tests to assign

You must ensure the sample is deleted and reentered it with the correct information.



1. On the sample screen, select the Delete Sample option.

A Delete Sample dialog box will appear.



2. Select the Delete option to delete the sample. If you don't want to delete the sample, select the x in the top right corner of the dialog box to dismiss it.

NOTE: Deleted samples are purged from MAC and cannot be retrieved. If a sample is incorrectly deleted, it must be reentered as a new sample.

NOTE: MAC does not reuse MAC Sample Ids. Once a sample is deleted, if you attempt to search for that sample id, you will receive a message, No Records Found. If you have a sample id (for example, from a sample transmittal card) that does not match the sample in MAC, most likely it was created in a different environment or was deleted. For example, the user who created the sample thought they were in the production environment and were actually in the training environment.

NOTE: You cannot delete a sample that has been included in a comparison package until that comparison package is deleted. Also, if there are findings for the sample or the comparison package that are not excluded in the MC Review. If you do not see the Delete option, contact the appropriate local DAC to see if the project has an MC Review generated and if the sample or comparison package of the sample you are trying to delete has findings.

To delete a sample:

- All sample findings must be excluded
- If the sample is in a comparison package
 - All comparison package findings must be excluded
 - The comparison package must be deleted

In most cases, for a sample to have these features, it is past the point that a user can delete the sample. If you do not see the delete option, contact your local DAC.

For proctor samples to be deleted:

- All proctor sample findings must be excluded
- If the proctor sample is in a comparison package
 - All comparison package findings must be excluded
 - The comparison package must be deleted
- All ERS samples that have the proctor sample selected must be revised to another proctor sample or deleted

Chapter 15 – Sample Finalization

This chapter will describe the steps in Sample Finalization for project samples. Except for samples that are auto finalized, the PA must finalize all project samples, including those tested by SMO. The user who performs the steps in each section is included in the title of the section for further clarification. The goal of this is to ensure the data used in the acceptance decision is correct and complete.

A. Finding a Sample Awaiting Finalization (PA)

Project samples must be finalized one at a time so the sample data and test results are reviewed fully before creating comparison packages. Some of the sample header information and test results will impact the comparison. Before comparison packages are created, the data should be reviewed and confirmed to ensure that the comparison status is correctly applied.

The screenshot shows a web application interface for sample finalization. The main heading is "Sample 1700063964 [Pending Finalization]". Below this, there are several sections:

- Sample ID:** 1700063964, **Sample Status:** Pending Finalization
- Sample Initiated By:** Susan Musselman, **Sample Initiated Date:** 2/22/2017, **Last Updated By:** Susan Musselman, **Last Updated On:** 3/17/2017
- Material Certification:** 408459-2-52-01 [In Final Review]
- Material Information:** This section is expanded and shows:
 - Sample Category:** Contracts (T7220 - CRS CONTRACTS [PRINCE CONTRACTING, LLC]) and Projects (408459-2-52-01: I-75 (SR 93A) FM S OF SR562(FOWLER AVE) TO N OF CR 581 (BB DOWNS))
 - Material:** 346 - Portland Cement Concrete, **MAC Spec:** 346 - Portland Cement Concrete, Supplemental Specification, 01/2009, v1.8
- Sample Information:** This section is also expanded and shows:
 - Company:** ABC Road Company
 - Method of Acceptance:** Sampling And Testing, **Sample Level:** QC, **Category:** Class IV (5500 PSI) / Conventional, **Structural Concrete Production Facility:** 26-999 - ABC Road Company Training Concrete Plant 2, **Mix Design:** 02-9998, **Allow any Approved Mix Design:** No
 - Sampled By Tech:** F12345678, **Date Sample Taken:** 2/21/2017
 - Higher Class in Lieu of Lower Class:** No

1 On the sample screen, click on the Material Information tab, Sample Information tab and Associated Tests tab to expand them. The next step is to review the sample and test data.

B. Reviewing the Sample and Test Data (PA)

1. Using the sample finalization checklists, review the sample and test data.

- a. [Asphalt Plant Sample Finalization Guide List](#)
- b. Rolling Straightedge Sample Finalization Guide Lists
 1. [Pre 07/01/2020](#)
 - ii. [Post 07/01/2020](#)
- b. [Structural Concrete Sample Finalization Guide List](#)
- c. [Soils/Earthwork Lab Sample Finalization Guide List](#)
- d. [ERS Field Density Sample Finalization Guide List](#)

For example, the sample in the screenshot above shows that the technician who took the sample was not qualified. Confirm with the Data Entry personnel that the correct TIN was selected. The TIN should **not** be changed if the data is correct and the technician was not qualified. If the flag is because the Data Entry user selected the wrong technician, send the sample back to the sample data entry company to have it corrected.

Another example of incorrect sample header information is the FDOT Sample Number. The field does not capitalize alpha characters at data entry. The FDOT Sample Number cc40001v is technically incorrect. The PA may return it to have the alpha characters corrected or may choose to leave it as it is since the sample sorting on the FDOT Concrete Sample Number Lot Number report is not impacted. CC4007V (missing a 0) will impact sample sorting and needs to be revised so that the verification sample sorts after CC40007Q on the report.

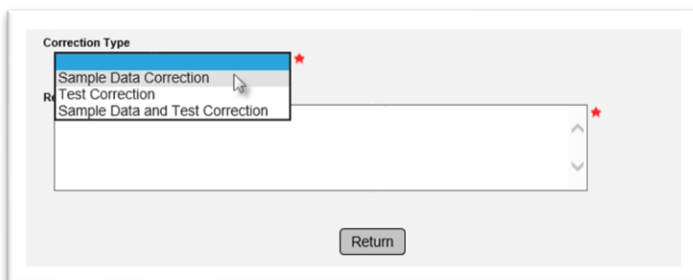
Once you have determined if the sample needs to be returned for sample data corrections, test result entry corrections, or both, you can return the sample. If your review shows that no data needs to be corrected, skip to [I. Finalizing the Sample \(PA\)](#).

C. Returning a Sample for Sample Data Correction (PA)

If the sample data is incorrect, but the test results seem appropriate, the PA should return the sample to the company that created the sample by selecting the Sample Data Correction option. This opens the sample information portion of the sample, but not the test results.

1. On the sample screen, select the Return Sample option.

A Return Sample dialog box will appear.



2. Select the Sample Data Correction option from the Correction Type drop down list.



3. Enter the information that needs to be revised in the Reason field.

4. Select the Return option to return the sample to the company that created the sample. The sample header will ONLY be opened for data corrections.

The sample status will be revised to Sample Data Correction Needed.

NOTE: Do **NOT** return a sample for correction if any of the key fields are incorrect. A key field is a MAC Spec, a category, a type, a sample level, a sample purpose, anything that MAC would use to determine what the sample is and what tests are on the sample. The system will allow the user to revise any of these, but all the requirements on the new designation may not be updated. The only option for a sample that is entered under an incorrect key field is to reenter the sample under the correct designation and have the sample that is incorrectly designated deleted (see Chapter 10, [B. What Should Not Be Changed on a Sample](#)). This is the only way to ensure that MAC applies all requirements to the sample.

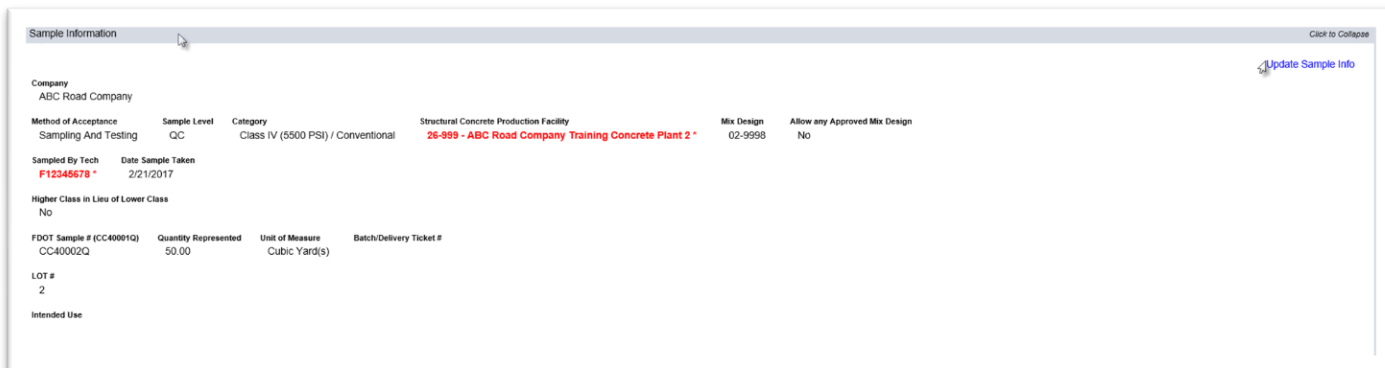
D. Correcting the Sample Data and Returning the Sample to FDOT (Data Reviewer)

If the sample has been returned by the PA for sample data corrections, the sample header information is opened to data reviewers in the company that created the sample. None of the test information can be corrected, even if the laboratory or users for the company that tested it are the same as the company that created the sample.

To correct the sample header information:



1. On the sample screen of the returned sample, click on the Sample Comments tab to expand it. The information the PA entered is displayed here. Make note of the corrections needed.



2. Click on the Sample Information tab to expand it.
3. Select the Update Sample Info option.

An Update Sample Info dialog box will appear.

Update Sample Info

Sample Level: QC Category: Class IV (5500 PSI) / Conventional Structural Concrete Production Facility: 26-999 - ABC Road Company Training Co Mix Design: 02-9998

Allow any Approved Mix Design:

Sampled By Tech: Bran Stark [F12345678] Date Sample Taken: 2/21/2017

Higher Class in Lieu of Lower Class:

FDOT Sample # (CC40001Q): CC40002Q Quantity Represented: 50.00 Unit of Measure: Cubic Yard(s) Batch/Delivery Ticket #:

LOT #: 2

Intended Use:

Save

4. Make the requested changes.
5. Select the Save option to save the changes.

To return the sample to pending finalization for the PA to review:

Correction Made - Submit for FDOT Verification Create New Sample

6. Select the Correction Made – Submit for FDOT Verification option.

A Correction Made – Submit for FDOT Verification dialog box will appear.

Correction Made - Submit for FDOT Verification

By submitting this sample to FDOT it will no longer be updatable. Please ensure all tests have been completed and all information has been updated.

Submit for FDOT Verification

7. Select the Submit for FDOT Verification option.

E. Returning a Sample for Test Result Entry Correction (PA)

If the test data is incorrect, the PA should return the sample to the company of the laboratory that tested the sample. If it is a field sample, it will be returned to the company that created the sample.

Sample 1700063964 [Pending Finalization] Go To Sample Type Sample ID

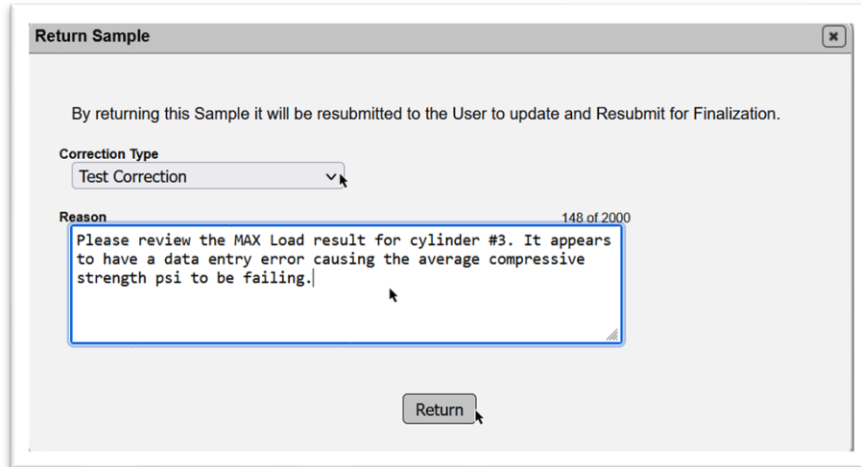
Finalize Sample Return Sample View Sample Transmittal Information for Print View Sample Certificate of Analysis for Print View History

Sample ID	Sample Status	Sample Initiated By	Sample Initiated Date	Last Updated By	Last Updated On
1700063964	Pending Finalization	Susan Musselman	2/22/2017	Susan Musselman	3/17/2017

Material Certification: ANS 450, 9, 67, 14 (in Final Database?)

1. Select the Return Sample option.

A Return Sample dialog box will appear.



The dialog box is titled "Return Sample" and contains the following elements:

- A message: "By returning this Sample it will be resubmitted to the User to update and Resubmit for Finalization."
- A "Correction Type" dropdown menu with "Test Correction" selected.
- A "Reason" text area with a character count of "148 of 2000". The text inside reads: "Please review the MAX Load result for cylinder #3. It appears to have a data entry error causing the average compressive strength psi to be failing."
- A "Return" button at the bottom.

2. Select the Test Correction option from the Correction Type drop down list.
3. Enter the information that needs to be revised in the Reason field.
4. Select the Return option to return the sample to the company that created the sample. The associated tests will be opened for data corrections.

The sample status will be revised to Test Correction Needed.

F. Correcting the Test Results and Returning the Sample to FDOT (Data Reviewer)

If the sample has been returned by the PA for test corrections, the associated tests are opened to data reviewers in the company of the laboratory that tested the sample. None of the sample information can be corrected, even if the laboratory or users for the company that created the sample is the same as the company that performed the tests.

To correct the test information:



The dialog box is titled "Sample Comments [1]" and contains the following elements:

- A comment by "Susan Musselman" dated "4/2/2024 9:14:20 AM".
- The comment text: "Please review the MAX Load result for cylinder #3. It appears to have a data entry error causing the average compressive strength psi to be failing."
- A blue link labeled "Add Response" below the comment.

1. On the sample screen of the returned sample, click on the Sample Comments tab to expand it. The information the PA entered is displayed here. Make note of the corrections needed.

Associated Tests [5] Click to Collapse

[Perform Multiple Tests](#)

	Lab or Field	Lab ID	Tester	Test Disposition	Test Status	Required	Which test Rules?
ASTM C143 Slump of Hydraulic Cement Concrete							
1	Initial Test	Field	F12345678 *	Pass	Test Complete	Required	Perform Test Mark Test Not Performed
ASTM C173/ASTM C231 Air Content of Freshly Mixed Concrete							
2	Initial Test	Field	F12345678 *	Pass	Test Complete	Required	Perform Test Mark Test Not Performed
ASTM C1064 Temperature of Freshly Mixed Portland Cement Concrete							
3	Initial Test	Field	F12345678 *	Pass	Test Complete	Required	Perform Test Mark Test Not Performed
FM 5-501 - Early Sampling for WICM Ratio							
4	Initial Test	Field	F12345678 *	Fail *	Test Complete	Required	Perform Test Mark Test Not Performed
ASTM C39 Compressive Strength							
5	Initial Test	Lab	C0ABC1	F12345678 *	Pass	Test Complete	Perform Test Mark Test Not Performed Retest

- Click on the Associated Tests tab to expand it.
- Select the Perform Multiple Tests option or the Perform test option (if only one test needs to be corrected).

A Perform Multiple Tests or Perform Test dialog box will appear.

Perform Test

Test
ASTM C39 Compressive Strength

Tester: * Testing Lab: Date Test Performed: How many Specimen?:

Specimen Info

Type of Specimen:
 Is Hardened Density Needed?:
 Age: Days

	Specimen 1	Specimen 2	Specimen 3
Length 1 (in)	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>
Length 2 (in)	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>
Length 3 (in)	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>
Average Length	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>	<input type="text" value="8.00"/>
Diameter 1 (in)	<input type="text" value="4.00"/>	<input type="text" value="4.01"/>	<input type="text" value="4.00"/>
Diameter 2 (in)	<input type="text" value="4.00"/>	<input type="text" value="4.03"/>	<input type="text" value="4.00"/>
Average Diameter (in)	<input type="text" value="4.00"/>	<input type="text" value="4.02"/>	<input type="text" value="4.00"/>
Area (in ²)	<input type="text" value="12.57"/>	<input type="text" value="12.69"/>	<input type="text" value="12.57"/>
Length CF	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
Max Load (lbs)	<input type="text" value="72,000"/>	<input type="text" value="71,510"/>	<input type="text" value="7,160"/>
Fracture Type	<input type="text" value="1"/>	<input type="text" value="1"/>	<input type="text" value="1"/>
End Treatment Used	<input type="text" value="Ground"/>	<input type="text" value="Ground"/>	<input type="text" value="Ground"/>
Compressive Strength (psi)	<input type="text" value="5,728"/>	<input type="text" value="5,635"/>	<input type="text" value="570"/>

Average Compressive Strength (psi) Does not meet target/limit [Average Compressive Strength >= 5,500]

Test Notes +

- Make the necessary changes.
- Select Save to save the changes.

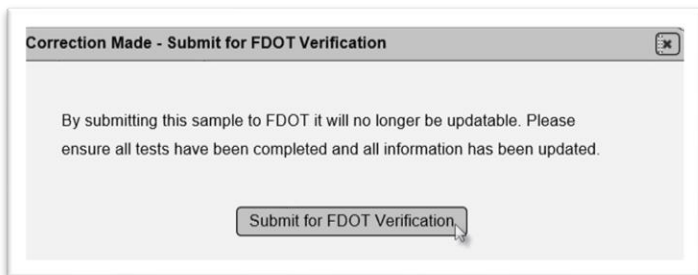
To return the sample to pending finalization for the PA to review:

Sample Status

[Correction Made - Submit for FDOT Verification](#) [Create New Sample](#)

- Select the Correction Made – Submit for FDOT Verification option.

A Correction Made – Submit for FDOT Verification dialog box will appear.



7. Select the Submit for FDOT Verification option.

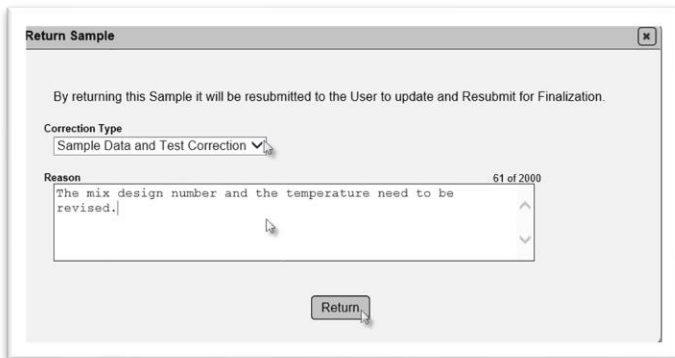
G. Returning a Sample for both Sample and Test Corrections (PA)

If the sample header and test data are incorrect, the PA should return the sample to the company of the user that created the sample and company of the laboratory that tested the sample. Both the sample information and the test information are open for corrections when the PA makes this selection.



1. Select the Return Sample option.

A Return Sample dialog box will appear.



2. Select the Sample Data and Test Correction option from the Correction Type drop down list.
3. Enter the information that needs to be revised in the Reason field.
4. Select the Return option to return the sample to the company that created the sample. The sample header AND associated tests will be opened for data corrections.

The sample status will be revised to Sample Data and Test Correction Needed.

H. Correcting the Sample and Test Data and Returning the Sample to FDOT (Data Reviewer)

If a different company tested the sample than the company that created the sample, a Data Reviewer from each company must make the revisions needed. The two Data Reviewers need to communicate to determine who will return the sample after the corrections have been made.

A Data Reviewer from the company that created the sample should follow the sample data correction instructions in [D. Correcting the Sample Data and Returning the Sample to FDOT \(Data Reviewer\)](#); however, they should not return the sample until the test result Data Reviewer has indicated the sample Data Reviewer should return it and the test result Data Reviewer has completed the necessary test changes.

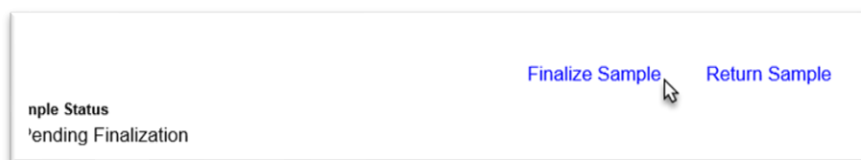
A Data Reviewer from the company that tested the sample should follow the test data correction instructions in [F. Correcting the Test Results and Returning the Sample to FDOT \(Data Reviewer\)](#); however, they should not return the sample until the sample header Data Reviewer has indicated the test result Data Reviewer should return it and the sample header Data Reviewer has completed the necessary sample data changes.

If the sample was created and tested by the same company, a Data Reviewer can complete both sections and submit the sample to FDOT when the corrections are made.

I. Finalizing the Sample (PA)

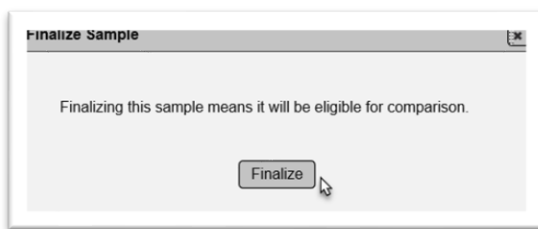
Once the sample and test data are correct, or if the initial review shows no sample or test data issues, you are ready to finalize the sample.

Just because a sample is finalized does not mean it is at the end of the sample life cycle. Do not take the sample status of Finalized to mean the sample is closed. A finalized sample may still be considered open if it is required to be in a comparison ([Chapter 1 – Project Sample Life Cycle](#)).



1. On the sample screen of the sample you wish to finalize, select the Finalize Sample option.

A Finalize Sample dialog box will appear with a message advising you that this step will make the sample eligible for comparison packages.



2. Select the Finalize option.

Chapter 16 – Comparison Packages

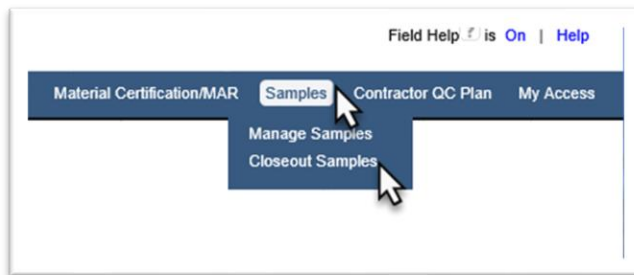
If samples are required to be in a comparison package, the sample is still considered to be open, even if the sample itself has been finalized. When do you create a comparison package? The time when you should create a comparison package depends on the material and the time requirements for resolution.

- Asphalt – **VT does not test until all QC testing is complete.** Create the comparison package as soon as the VT sample is finalized.
- Soils/Earthwork – **Do not finalize the VT sample until you have finalized all the QC samples** and are ready to create the comparison package and run the comparison.
- Structural Concrete – **Create the comparison package as soon as the original sample and the verification sample are finalized.** Do **NOT** wait for all 5 samples in the comparison package. For example, if the QC and VT samples are in LOT 2, you will have QC1, QC2 and VT2 available when all 3 are finalized. Create the comparison package and designate QC2 as the original sample, VT2 as the verification sample and QC1 will be designated as an associated sample. Add the other associated samples later as they are finalized (see [B. Adding Associated Samples to an already created Comparison Package](#)).

A. Creating a Comparison Package

To create a comparison package, the following must be present:

1. The MAC Spec needs to have a comparison package definition.
2. The samples in the comparison package must be finalized.
3. The samples must be in the same MAC Spec. Comparison packages cannot cross MAC Specs. They can be in different versions of the same MAC Spec.
4. Other material specific requirements, such as all structural concrete samples must have the same mix design number.



1. Select the Samples menu option.
2. Select the Closeout Samples sub menu option.

You will be navigated to the Comparison Package screen.

[Finalize Multiple Samples](#) [Create Comparison Package](#) [Create Test Comparison Package](#)

Comparison Package 165324 [2301153665 QC-VT]

3. Select the Create Comparison Package option to create a new comparison package.

MAC will populate the comparison package criteria from the last sample you **finalized**. This is a convenient feature if you finalize similar samples and then move to the comparison package steps. If you are creating comparison packages for a material you did not just finalize, you will have to alter the information for the material you are currently working on.

4. If the populated information is incorrect, select the x by the field (like Material/Spec) to remove the default and select something else.

5. Some lots can cross projects on the same contract, like structural concrete. If the FPN listed does not retrieve all the samples needed in the comparison package because some of them are on a different FPN on the same contract, enter the contract in the blank contract field and select the additional FPN. Repeat until all FPNs in the comparison package are selected.

6. Additional filters can be designated in the Additional Optional Filters section.

MAC will find all the finalized samples that are not yet in a comparison package that meet the search criteria.

4) Select Samples for Comparison Package

Sample	Date Sample Taken	FDOT Sample Number	LOT #	Mix Design	Sample Level	Production Facility	Product	Select All
1700064171	3/24/2017	CC40001Q	1	02-9996	QC	26-998 - ABC Road Company Training	Concrete Plant 1	<input type="checkbox"/>
1700064172	3/24/2017	CC40002Q	2	02-9996	QC	26-998 - ABC Road Company Training	Concrete Plant 1	<input type="checkbox"/>
1700064173	3/24/2017	CC40003Q	3	02-9996	QC	26-998 - ABC Road Company Training	Concrete Plant 1	<input type="checkbox"/>
1700064174	3/27/2017	CC40004Q	4	02-9996	QC	26-998 - ABC Road Company Training	Concrete Plant 1	<input type="checkbox"/>
1700064175	3/24/2017	CC40002V	2	02-9996	VT	26-998 - ABC Road Company Training	Concrete Plant 1	<input type="checkbox"/>

Showing 1 to 5 of 5

7. Select the samples from the returned list that will be part of this comparison package. If all the samples returned are in the same comparison package, use the Select All option.

The selected samples will be populated in the Configure Selected Samples section. MAC sometimes guess at which samples to compare to each other. It does not always make a full selection or select the correct samples.

5) Configure Selected Samples

Sample Level	FDOT Sample Number	LOT #	Mix Design	Original	Verification	
1700064171	QC	CC40001Q	1	02-9996	<input type="checkbox"/>	<input type="checkbox"/>
1700064172	QC	CC40002Q	2	02-9996	<input type="checkbox"/>	<input type="checkbox"/>
1700064175	VT	CC40002V	2	02-9996	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Show Comparison after Creation
 Stay on Create Screen to create more Comparisons

8. If the original or verification sample was selected by MAC and it is correct, you can leave them as it is. If the original or verification sample selected by MAC is incorrect, or was not selected by MAC, select the appropriate sample(s).

9. Create Package or Create Package and Run Compare

a. Select Create Package to designate the samples and save the comparison package. You will have to select the Run Compare on Comparison Package later.

NOTE: Until the comparison is run, the samples in the comparison package are considered to be open.



b. Select Create Package and Run Compare if you want to save the package and run the comparison now.

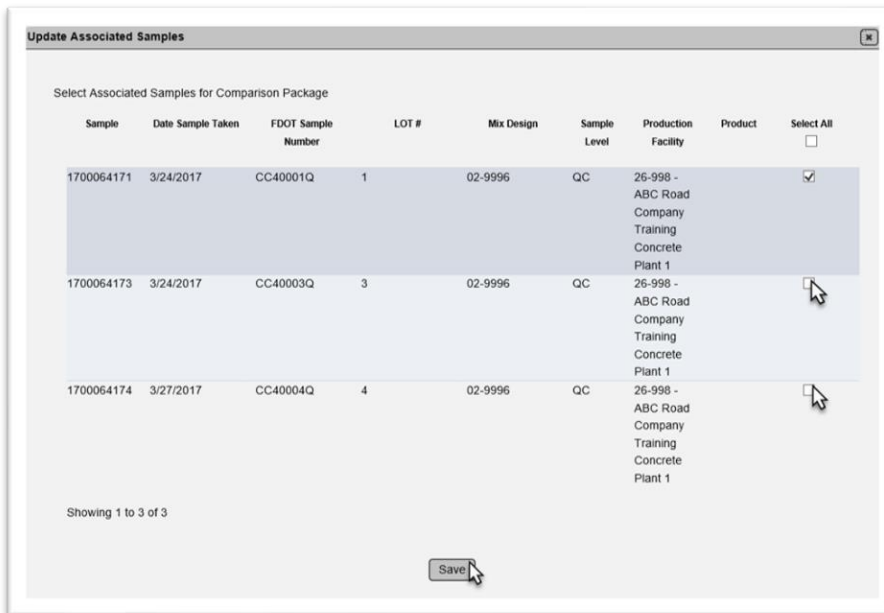
If you selected Create Package and Run Compare, the comparison package status will be updated to either Compares or Does Not Compare.

B. Adding Associated Samples to a Comparison Package



1. On the comparison package screen, click on the Associated Samples tab to expand it.
2. Select the Update Associated Samples option.

An Update Associated Samples dialog box will appear. It will be populated with the samples that are not yet in a comparison package that match the original search criteria used to create the package.



3. Select the samples to be added as associated samples.
4. Select the Save option to save the samples to the comparison package.

C. Adding Resolution to a Comparison Package that Does Not Compare

When the comparison package is created and the comparison is run, if the original sample and verification sample do not compare, the comparison package status is updated to Does Not Compare. The PA will need to initiate the resolution process to have the resolution samples processed and finalized so they can be added to the comparison package.

NOTE: Selecting Run Resolution does not trigger the resolution process. It is used to add the resolution sample(s) to the comparison package after they are tested, submitted to FDOT for Verification and finalized. Do not select the Run Resolution until you have initiated the resolution process outside of MAC, the resolution samples have been submitted to FDOT and finalized.

Comparison Package 4522 [1700064172 QC-VT] Go To Comparison | Type Comparison Package

Run Resolution | Mark Resolution Not Performed | Delete Comparison Package

Comparison Package ID	Comparison Definition	Comparison Type	Comparison Status
4522	Compressive Strength	Includes Original Sample	Does Not Compare

1. On the comparison package screen that requires resolution, select the Run Resolution option.

A Run Resolution dialog box will appear. This dialog box includes any resolution sample with the same comparison criteria as the comparison package that is not already included in a comparison package.

Run Resolution

Select Resolution Sample For Original Sample

Mix Design: 02-9996 * FDOT Sample Number: [] LOT #: []

Sampled On or After: [] Sampled Before: []

Sample	Contract/Project	Date Sample Taken	FDOT Sample Number	LOT #	Mix Design	Sample Level	
1	1700064176 T2552 / 430554-1-52-01	3/24/2017	CC40002QR	2	02-9996	QR	✓ Select

Showing 1 to 1 of 1

Select Resolution Sample For Verification Sample

Mix Design: 02-9996 * FDOT Sample Number: [] LOT #: []

Sampled On or After: [] Sampled Before: []

Sample	Contract/Project	Date Sample Taken	FDOT Sample Number	LOT #	Mix Design	Sample Level	
1	1700064178 T2552 / 430554-1-52-01	3/24/2017	CC40002V	2	02-9996	VR	✓ Select

Showing 1 to 1 of 1

2. Click on the blue Select option to indicate the resolution samples. Since we are using concrete, there is a QR and a VR for every comparison package.

Run Resolution

Select Resolution Sample For Original Sample

1700064176 QR [CC40002QR] * Change

Select Resolution Sample For Verification Sample

1700064178 VR [CC40002V] * Change

Run

3. Once the appropriate sample(s) is/are designated, select the Run option to apply the resolution logic.

D. Designating Resolution Not Performed

If resolution is required and cannot be performed, the comparison package must be designated that the resolution was not performed.



1. On the comparison package screen where the resolution was not performed, select the Mark Resolution Not Performed option.

A Mark Resolution Not Performed dialog box will appear.



2. Select the reason the resolution cannot be performed, for example the resolution samples are missing because they were lost, or they were logged in but the tests can't be performed by the resolution lab.

3. Select the Save option.

The Resolution status will be updated to Not Performed with the reason you selected. This is considered an exception to the PMCL and will create a finding the PA should respond to.

E. Creating an Incomplete Comparison Package

Sometimes the comparison package cannot be completed because the original sample, verification sample or both are missing. When this happens, you still need to create a comparison package with the samples that are available and designate the comparison package as incomplete. Samples that are required to be in a comparison package but are not considered to be open samples.

4) Select Samples for Comparison Package

Sample	Date Sample Taken	FDOT Sample Number	LOT #	Mix Design	Sample Level	Production Facility	Product	Select All
1700064171	3/24/2017	CC40001Q	1	02-9996	QC	26-998 - ABC Road Company Training Concrete Plant 1		<input checked="" type="checkbox"/>
1700064173	3/24/2017	CC40003Q	3	02-9996	QC	26-998 - ABC Road Company Training Concrete Plant 1		<input checked="" type="checkbox"/>
1700064174	3/27/2017	CC40004Q	4	02-9996	QC	26-998 - ABC Road Company Training Concrete Plant 1		<input checked="" type="checkbox"/>
1700064175	3/24/2017	CC40002V	2	02-9996	VT	26-998 - ABC Road Company Training Concrete Plant 1		<input checked="" type="checkbox"/>

Showing 1 to 4 of 4

5) Configure Selected Samples

Sample	Sample Level	FDOT Sample Number	LOT #	Mix Design	Original	Verification
1700064171	QC	CC40001Q	1	02-9996	<input type="checkbox"/>	<input type="checkbox"/>
1700064173	QC	CC40003Q	3	02-9996	<input type="checkbox"/>	<input type="checkbox"/>
1700064174	QC	CC40004Q	4	02-9996	<input type="checkbox"/>	<input type="checkbox"/>
1700064175	VT	CC40002V	2	02-9996	<input type="checkbox"/>	<input checked="" type="checkbox"/>

1. Perform a create comparison package ([A. Creating a Comparison Package](#)). The results will have one key sample missing. In this example, the QC original sample is missing. The VT sample and all the associated samples still need to be in comparison package to be considered closed.
2. Indicate all the samples that should be in this incomplete package.

Create Comparison Package Go To Comparison | Type Comparison Package id

1) Select MAC Spec/Comparison Logic

Material/Spec: * Spec Edition: Comparison Package Definition:

Lot Terminated

Incomplete Package

3. Under Section 1) Select MAC Spec/Comparison Login/select the Incomplete Package option.

Incomplete Package

Incomplete Comparison Package Reason Code

Filter Sample List

4. An Incomplete Comparison Package Reason Code field will appear. Select the appropriate reason from the dropdown list.

Currently if you attempt to create the package without designating an original and verification sample, you will receive an error message.

ERROR: Incomplete Package must at least have an Original or Verification Sample

5. If you see this message, select any sample in the incomplete package as the Original Sample. In our example, the reason we have an incomplete package is because the original sample is the missing sample, so this error message is incorrect. But the system will not allow you to continue until a sample is selected.

Create Package

6. Select the Create Package option at the bottom of the screen to create the package.

The Comparison Status will be updated to Incomplete Package with the reason you assigned. This will create a finding the PA should respond to and may result in an exception to the PMCL.

F. Printing the Comparison Package Information Report

There is a standard Comparison Package Report that can be generated from the comparison package screen.

Update Comparison Package Delete Comparison Package View for Print

1. On the comparison package screen, select the View for Print option.

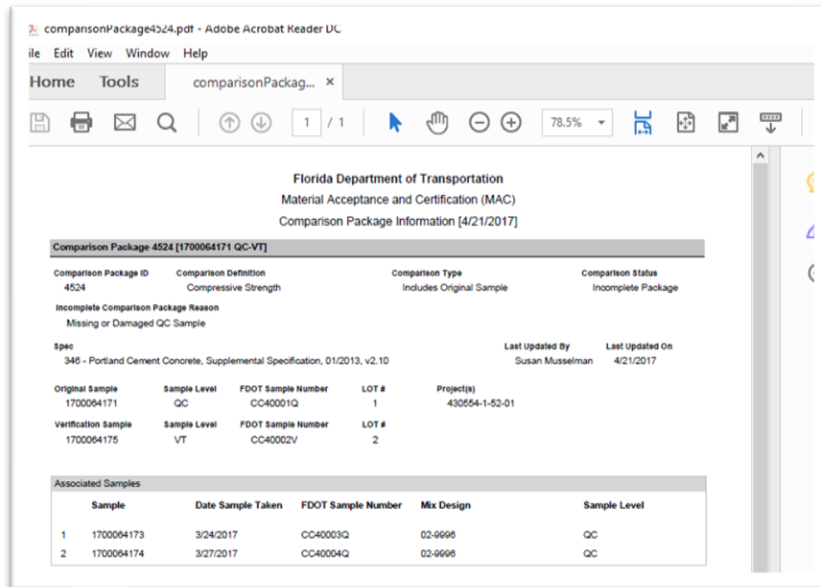
MAC will download the data into a pdf report. The appearance of the dialog box is a function of the browser you are using.

Do you want to open or save comparisonPackage4524.pdf (2.81 KB) from fdotews1.dot.state.fl.us?

Open Save Cancel x

2. Select the Open option to view the report.

The report will be opened in pdf.



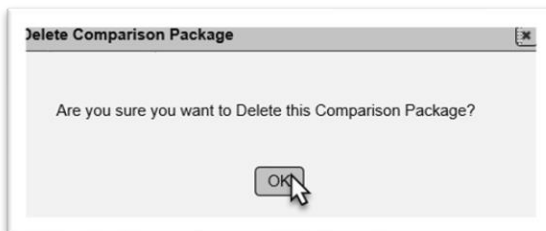
G. Deleting a Comparison Package

Sometimes after you have created a comparison package you may need to delete it.



1. On the comparison package screen, select the Delete Comparison Package option.

A Delete Comparison Package dialog box will appear.



2. Select the Delete option to delete the comparison package. If you don't want to delete the comparison package, select the x in the top right corner of the dialog box to dismiss it.

NOTE: You cannot delete a comparison package if there are findings that are not excluded in the MC Review. If you do not see the Delete option, contact the appropriate local DAC to see if the project has an MC Review generated and if the comparison package you are trying to delete has findings.