AASHTOWare Project
Construction and Materials
Inspector Role - Materials
Training Manual

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Working With Sample Records

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Materials Reference Information

Material information is based on the Materials Manual with emphasis on the 601 Section for Sampling and Testing. The Materials Manual can be found on the MDT intranet page https://www.mdt.mt.gov/publications/manuals/materials_man.shtml as well as the MDT web page at Materials Manual and Individual Test Procedure (Current/Archived) | Montana Department of Transportation (MDT) (mt.gov)

The full manuals are based by contract letting date. Even if there is a newest copy, the user's contract will still be based on the manual that was current at the time of the contract let date.

The Standard Specifications is also by letting date. Copies of the spec book can be found at: Standard Specifications | Montana Department of Transportation (MDT) (mt.gov)

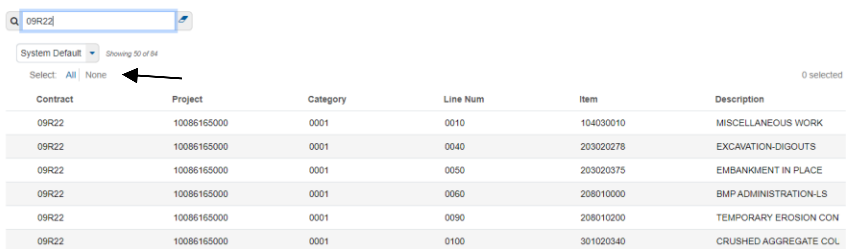
It is highly recommended that the inspector reviews all Contract Special Provisions for any changes to materials requirements for items. These are contract specific and the sampling/testing requirements will need to be filled appropriately. The inspector should run the Contract Material Acceptance (Checklist) in AASHTOWare at least once a month, if not more frequently, to verify that sampling/testing is being completed in a timely manner.

Any questions or concerns about materials can be addressed by the District /Area lab as well as the EPM/FOP. The District/Area labs are a great resource of information, and the EPM/FOP can help with any questions.

Something to keep in mind, if a test is designated as a field test, it is the responsibility of the field crew to complete the sample requirements. If it is designated as a lab test, the testing responsibility will fall to them. AASHTOWare tests are based on the responsibility called out in the Materials Manual 601 section.

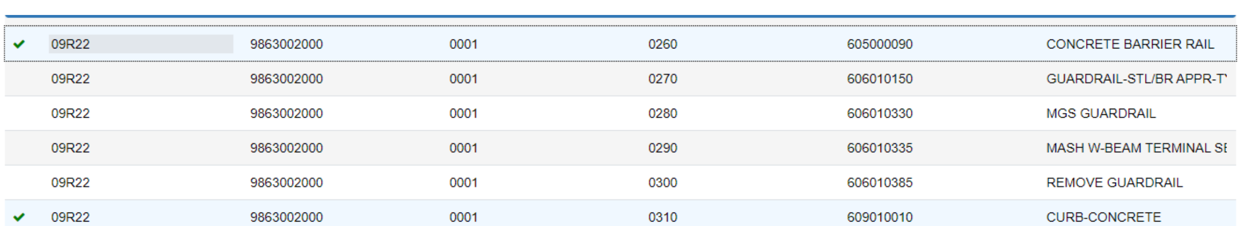
1. Generating the Materials Acceptance Checklist (CMAR)

1. Click on the **Actions** button in the upper right corner
2. Select **Generate Report**
3. In the search box, type in check
   a. User can also scroll through the list
4. Select the **Contract Material Acceptance (Checklist)**
5. Enter in the contract **5-digit contract** number in the search box
6. If the user would like all the bid items shown, select the **All link** under the System Default box
   a. If this is hit and the user does not want all of the items, select None



Contract	Project	Category	Line Num	Item	Description
09R22	10086165000	0001	0010	104030010	MISCELLANEOUS WORK
09R22	10086165000	0001	0040	203020278	EXCAVATION-DIGOUTS
09R22	10086165000	0001	0050	203020375	EMBANKMENT IN PLACE
09R22	10086165000	0001	0060	208010000	BMP ADMINISTRATION-LS
09R22	10086165000	0001	0090	208010200	TEMPORARY EROSION CON
09R22	10086165000	0001	0100	301020340	CRUSHED AGGREGATE COL

7. If the user is only looking at 1 or a couple of bid items, select the items by clicking on the item(s)
   a. A green check mark will appear by each item the user has selected.



✔	09R22	9863002000	0001	0260	605000090	CONCRETE BARRIER RAIL
	09R22	9863002000	0001	0270	606010150	GUARDRAIL-STL/BR APPR-T'
	09R22	9863002000	0001	0280	606010330	MGS GUARDRAIL
	09R22	9863002000	0001	0290	606010335	MASH W-BEAM TERMINAL SE
	09R22	9863002000	0001	0300	606010385	REMOVE GUARDRAIL
✔	09R22	9863002000	0001	0310	609010010	CURB-CONCRETE

8. When the selections are complete, click on the **Execute** button on the component ribbon.
   a. This will open a new tab and the tab will be called Generate

To read the report:

1. The **Yellow line** is information about the bid item
2. The **Blue ribbon** is information for the item information below it.
   a. User should look at this ribbon and associate the information below the name.

In the **Gray box**:

- *Material*: The material code and name of the material
- *Material Set*: This is the name that the user will see in a DWR
- *Conv Factor*: A preset number that converts the unit of pay to the required testing material unit.
- *Material Qty*: The amount that is posted (paid) to date for a specific item.

MDT
Montana Department of Transportation

11/08/2023 13:06:52
AASHTOWare Project™ Version 4.9.2
Revision 040

Contract Material Acceptance Report

Contract: 09R22 W BROADWAY - OLD HWY 10 (MSLA)

Report Upd: 05/09/2022

Project	Catg	Line#	Item	Current Qty	Unit	Unit Price	Qty Posted to Date
9863002000	0001	0190	605000090 CONCRETE BARRIER RAIL	12.000	EACH	1,200.000	12.000

Material / Material Set	Conv Factor	Material Qty	Option	Acceptance Type	Sample Type / Field Insp Value	Acpt Method	Test Method	Smpl Resp	Test Resp	Rate/Freq	Size/ Units	Est	Req	Tkn	Def
551.02.01.01 Portland Cement Deck-Uses Conventional	1.00000	0.000	Acceptance: QPL Verification												
			QPL (per source)	Daily Work Report	QPL Verified					1/Contract		1	0	0	0
551.02.02.01 Fly Ash Deck-Uses Conventional	1.00000	0.000	Acceptance: QPL Verification												
			QPL (per source)	Daily Work Report	QPL Verified					1/Contract		1	0	0	0
551.02.03.01 Ground Granulated Blast Furnace Slag Deck-Uses Conventional	1.00000	0.000	Acceptance: QPL Verification												
			QPL (per source)	Daily Work Report	QPL Verified					1/Contract		1	0	0	0

- *Option*: The test requirement
- *Acceptance Type*: How the requirement is to be fulfilled. Either a DWR or a Sample Record
- *Sample Type/Field Inspection Value*: The type of requirement value
- *Test Method*: The required test
- *Smpl resp*: Who is responsible for collection of the sample
- *Test Resp*: Who is responsible for the specific test
  - FLD – Field crew test
  - D/AL - District/Area lab test
  - MTRL - Helena Materials
- *Rate/Freq*: How often a sample needs to be collected and tested
- *Size/units*: How much of a sample is needed for the test

- *Est*: How many samples might be needed per sampling frequency in the 601 section
- *Req*: How many is actually needed. (Based on the amount paid for and the frequency)
- *Tkn*: How many samples have been taken at that time
- *Def*: How many samples that are missing to fulfil contract requirements

Project	Catg	Line#	Item	Current Qty	Unit	Unit Price	Qty Posted to Date
8650015000	0001	0250	401020045 PLANT MIX SURF-3/4 IN	34,186.000	TON	52.720	541.030

Material / Material Set	Conv Factor	Material Qty	Option	Acceptance Type	Sample Type / Field Insp Value	Acpt Method	Test Method	Smpl Resp	Test Resp	Rate/Freq	Size/ Units	Est	Req	Tkn	Def
401.03.00.01 Plant Mix Surfacing Grade S - 3/4"	1.00000	541.030	Acceptance: Final Record Cores												
			Final Cores	Sample Record	Final Record	Test Results	Final Record Cores	DAL	DAL	0/Contract	45 LB	0	0	0	0

The Peach ribbon: Notation of the Acceptance action. It will correspond to the information below it in the dark gray box.

The Dark Gray Box: This is the information for the sample or Material Acceptance action. In the rows below it shows the Sample ID or acceptance action Status, the inspector ect.

Material / Material Set	Conv Factor	Material Qty	Option	Acceptance Type	Sample Type / Field Insp Value	Acpt Method	Test Method	Smpl Resp	Test Resp	Rate/Freq	Size/ Units	Est	Req	Tkn	Def
702.01.05.03 CHFRS-2p, Cationic High Float Rapid Set Emuls - Poly Mod CHFRS-2P	1.00000	141.019	Acceptance: Emulsion Acceptance												
			Test and Cert	Daily Work Report	Emulsion Sample Witnessed					1/35 TON	2 - 1 QT	5	5	4	1

1 per vessel,

DWR Date	Status	Inspector	Seq #	Field Insp Value	Comments	Rep Qty
Attachments					Doc Express Links	
07/07/2023	Approved	Patty Craft	1	Emulsion Sample Witnessed	1,1A	0.00
04123_CHFRS-2P_BOL_3088_1_1A.pdf						
07/07/2023	Approved	Patty Craft	1	Emulsion Sample Witnessed	2,2A	0.00
04123_CHFRS-2P_BOL_3092_2_2A.pdf						
07/07/2023	Approved	Patty Craft	1	Emulsion Sample Witnessed	3,3A	0.00
04123_CHFRS-2P_BOL_3094_3_3A.pdf						
07/07/2023	Approved	Patty Craft	1	Emulsion Sample Witnessed	4,4A	0.00
04123_CHFRS-2P_BOL_3100_4_4A.pdf						

Option	Acceptance Type	Sample Type / Field Insp Value	Acpt Method	Test Method	Smpl Resp	Test Resp	Rate/Freq	Size/ Units	Est	Req	Tkn	Def
Sample Record		Project Acceptance	Test Results	Emulsion Properties	FLD	MTRL	1/Contract	2 - 1 QT	1	1	4	0

1 per vessel taken, didn't want to mess with frequency action.

Sample ID	Sample Date	Status	Test #	Sample Type	Accpt Method	Rep Qty
Attachments				Doc Express Links		
20230707095640	07/06/2023	Pend Auth	1	Project Acceptance	Test Results	
04123_CHFRS-2P_BOL_3088_1_1A.pdf						
20230707101716	07/06/2023	Pend Auth	1	Project Acceptance	Test Results	
04123_CHFRS-2P_BOL_3094_3_3A.pdf						
20230707102339	07/06/2023	Pend Auth	1	Project Acceptance	Test Results	

One of the wonderful parts about the checklist is that the sample ID and DWR dates are hyperlinked. Right click on the sample id or the DWR and open in a new tab or window. This will allow the user to go directly to that record or DWR. This makes it a lot easier to navigate to the correct item for any corrections that may be needed.

Note:

- If an acceptance action or sample record was completed, but not showing on the checklist, check the Sample Type/Inspection Value, the Acceptance method and test method. If it is a DWR acceptance action, verify that it was associated to the correct test option.
- In a sample record, under the Acceptance Method, there is a choice of Test Results and Other. Other is not an option that MDT uses.
- IAC samples will show on the checklist for field samples. LLPI, Sieve to name a few. The test responsibility can be found in the test name. Verify with the FOP/Lead inspector about testing requirements and if specific tests are to be completed by the user.

Acceptance: IA Comparison - LLPI							
IA - LLPI	Sample Record	Independent Assurance	Test Results	IA LLPI Comp	DAL	MTRL	1/Contract
	Sample Record	Independent Assurance	Test Results	IA - LLPI - Fld	DAL	DAL	1/Contract

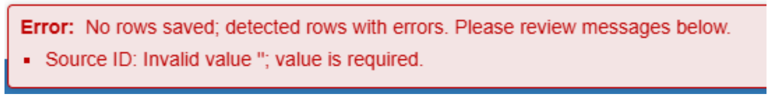
2. Creating a Concrete Sample Record

1. Navigate to **Sample Records** under the Inspector component and click on the link
2. Select the **white component row action arrow** on the blue component ribbon
    a. Located next to the Save button
3. Select the **Add** link

<u>The General Tab</u>

4. Enter the **Sample Date**
    a. This is the date the sample was obtained and tested
5. Enter in the **Material Code – Name**
    a. User can use the first 3 numbers of the material code if known
    b. User can start typing the name of the type of material
6. Enter in the **Witnessed by**
    a. This is by user last name
    b. If the user is completing the record for another inspector, the other inspector's name needs to be used
7. Enter in the **Specimen(s) Number**
    a. Numbering is extremely important with concrete
    b. Verify that the numbering is correct for the **classification** of concrete the record represents
    c. **Example**: Lot 1, T1-3, S 1-8 (Lot 1, tests 1-3, specimens 1-8)
8. Enter in the **Intended Use**
    a. This information is what the sample represents
        i. Curb/gutter, Sidewalk, Roll curb, Special Design, ect
9. Enter the **District/Area**
    a. This is where the user is from, not where the sample is going
10. **Control Type and Control Number** can be used, but it is not a requirement.
    a. User can use this to track a lot number
11. Enter in any **Remarks** as appropriate.
    a. It should be noted any time a truck was rejected, air content was low, ect
    b. Multiple rows can be used
12. Navigate to the **Sources/Facilities** tab

Note: If the user tries to save before entering a source, the system will error. Concrete classifications are a source required item.

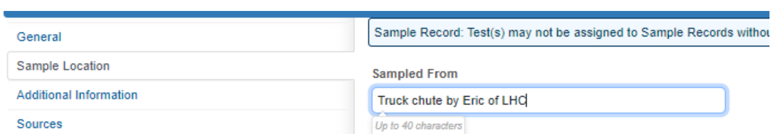


<u>Sources/Facilities Tab</u>

13. Click on the **Sources/Facilities Tab**
14. Click on the **Select Primary Source** button
15. In the **search box**, enter in the source the material is coming from
    a. User can place the cursor in the box and hit enter or click on the Show first 10 link
16. Click on the **Add to Sample Record** after choosing the supplier
17. **Save**

<u>Sample Location Tab</u>

18. Click on the **Sample Location Tab**
19. Fill in the information in the **Sampled From field**
    a. This needs to be filled out every time
    b. This field notes where the sample was obtained and by whom



20. **Save**

<u>Additional Information Tab</u>

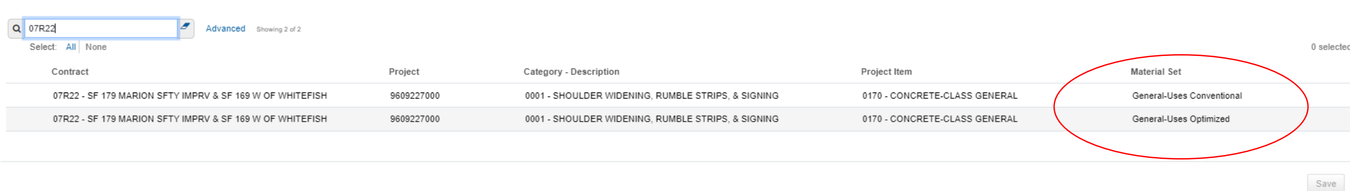
21. Select the **Additional Information Tab**
22. Click on the **Mix Design Type**
23. Select **PCC – Portland Cement Mix Design**
    a. Used for all concrete classifications
24. Enter in **the mix design number** for the classification of concrete being tested
    a. If unknown the mix design, verify with the District/Area Lab, the FOP or the contract shared drive folder
    b. If the mix design does not populate, enter the mix design ID in the Remarks Section on the General Tab. Let the lab be aware that the mix design is not populating. The lab can check and make sure that the mix design has been approved for use
    c. Concrete should not be placed without an approved mix design
25. **Save**

Destination Lab(s) Tab

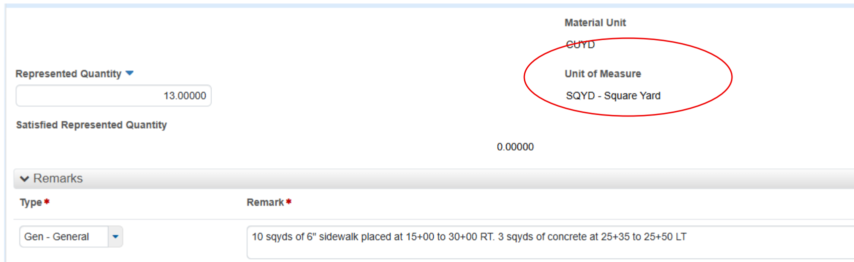
26. Select the **Destination Lab(s) tab**
27. Select **New**
28. Enter in the **date** of the test
    a. This is the date is the same date that the sample was obtained
29. Click on the **Lab Name** and enter **FIELD CREW**
    a. This is the chain of custody. This allows for sample tracking
    b. FIELD CREW HAS TO BE ADDED if they tested or sampled the material
    c. Tests are populated based on the lab information on this screen
30. Click **New** again
31. Enter **the date and the Lab Name** that the cylinders are going to
    a. If cylinders are being routed through the District/Area lab for testing, the lab that the cylinders are going through **MUST** be added
        i. **Example**: If a set of cylinders are being broken in Helena, and they are being given to Missoula lab to ship, then Missoula Lab should be on this tab along with the field crew
32. **Save**

Contract Tab

33. **Select the Contract Tab**
34. Click on the **Select Contract Project Item** button
35. **Enter in the contract number** this sample is referenced to
36. **Select the correct bid item(s) that this sample represents**
    a. Concrete has 2 types of material sets. **Conventional and Optimized**
    b. On the right side of the row, it will show the material set for that bid item
        ii. If user is unsure if the mix design is **Conventional** or **Optimized**, verify with the D/AL or FOP. It is extremely important that the correct item is chosen. This material is evaluated in QA for incentives/deducts

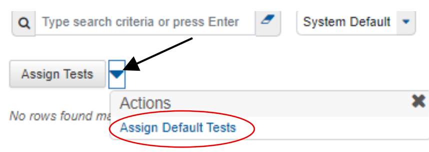


37. Click the **Save Button**
38. Select the **>** next to the Contract to expand the row
39. Enter in the **Represented Quantity**
    a. This is the **Measured** quantity. Not the amount on the batch ticket
    b. Note the Unit of Measure on the right side
40. Enter the Station(s) or other comments in the **Remarks** section
41. **Save**



<u>Tests Tab</u>

42. Select the **Tests Tab**
43. Click on the Blue drop arrow next to Assign Tests and select **Assign Default tests**
    a. If multiple tests are needed, see page 14 to add additional test runs

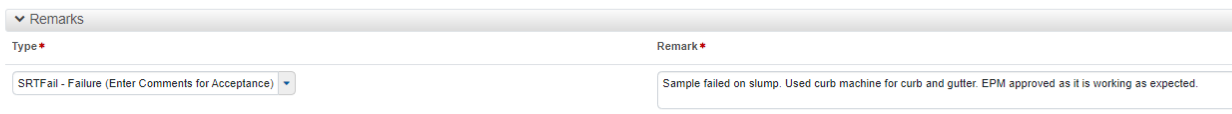


44. Click on the **1.0** on the **Concrete Properties field crew test**
45. Add in the date tested in the **Test Start Date**, **Test Completion** and **Due date** fields
    a. These dates should be the same since the sample is collected and tested for properties the same day
46. Click on the **Reference Specifications** tab on the left
47. Verify that the **Use for Test** checkbox is checked
    a. If this checkbox is not checked, click on the checkbox. Reference data will not populate if this box is not checked
    b. Contracts let after August 18th, 2023 should have the reference specifications coming in automatically
    c. It good practice to verify that the reference spec checkbox is checked

48. **Save**
49. Click on the **white component action drop arrow** on the blue component ribbon
50. Select the **MDT Concrete Properties** agency view
51. Fill out the agency view data fields with the testing information
    a. The checkbox for Performed with Cylinders **only** needs to be checked if cylinders were created with that specific Concrete Properties information
    b. If it is a properties only test (following the 551 section of the spec book for frequency/601 section) then the checkbox does not be checked
52. Enter **a Result Value** of Pass or Fail
53. **Save**
54. Click on the **Sample Record Test Quick link** under the Home Button

<u>Sample Record Test Summary</u>

55. Navigate to the **Remarks** section if applicable
    a. If something has failed in the testing, then a remark has to be added specifying why the sample is still going to be used.
    b. Use the Remark type of **SRTFail (Enter Comments for Acceptance)**
        iii. These comments will show up on the report MICO uses



56. **Save**
57. Click on the **white component action drop arrow** on the component ribbon
58. Select **Mark Test Complete**
59. **Let the FOP/EPM be aware that it is ready to be level 2 authorized**
    a. The FOP will get a notification after 30 days if it is not level 2 authorized and is marked complete
    b. Best practice is to mark tests complete when they are finished to save time later

Note:
If an agency view is not needed, and needs to be deleted, the agency view will need to be deleted. This includes agency views that were selected and no data entry occurred. The user will still need to clear the usage data.

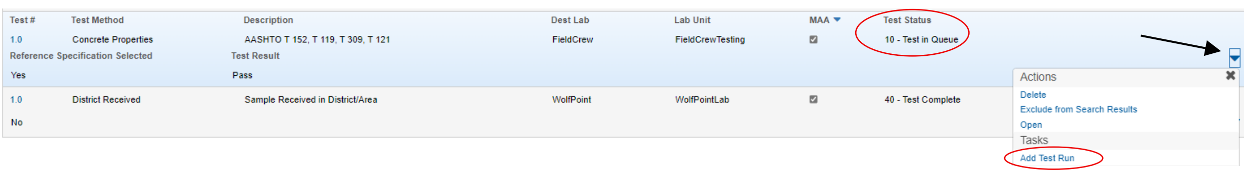
<u>To clear the usage data</u>:

- Click on **the agency view** that needs to be cleared
- Select the **white component drop arrow**
- Select **Clear Usage Data**
    - This will take the user to the Sample record Test Summary and allow the user to mark the reference spec checkbox. Follow steps 45 – 47

In 2022, an enhancement to AWP allowed the user to enter multiple test runs into a single sample record and count towards the test requirements without the need to make another sample record for a properties tests. All concrete properties are added to 1 record for the day. The exception is if the day's pour *exceeds* the lot requirements. If it exceeds the lot requirements, then a new record will need to be completed. See the Materials Manual 601 section and/or 501 & 551 sections in the spec book for lot requirements.

<u>To add a new test run</u>:

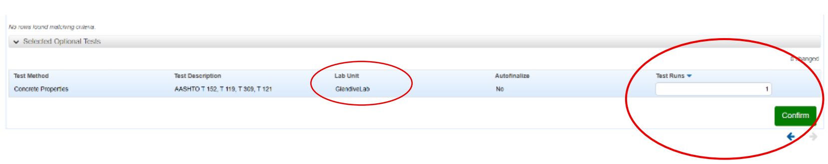
a. Click on **the blue row action drop down on the row**
b. Select **Add Test Run**
c. Follow the above steps to complete the testing data
d. **The user should note that doing this will take the same Test Status as the one it is added from. If it is Marked Complete or Level 2'd, the user will need to reach out to the FOP to have the subsequent test run(s) requeued to allow data entry**



If the user is aware that there will be multiple test runs for that day's pour, then Assign Tests may be used instead of the Default Tests option.

a. Click on the **Assign tests** Button
b. Using the blue **>** in the bottom right corner, navigate to the proper test
c. Select the **test method** needed
d. On the **Confirmation page**, enter in the number of test runs needed
e. Click on the green **Confirm button** at the bottom of the page

The user should use caution and make sure that the correct Lab unit is selected. If the user already has the Field crew test, it will not show. But it will show Concrete properties for the Lab.



3. Creating an Aggregate Sample Record

Aggregate Samples have both field and lab tests associated. The user will need to make sure the correct tests are associated to the record.

1. Navigate to **Sample Records** under the Inspector component and click on the link
2. Select the **white component arrow** on the blue component ribbon
    a. Located next to the Save button
3. Select the **Add** link

General Tab

4. Enter the **Sample Date**
    a. This is the date the sample was taken
5. Enter in the **Material Code – Name**
    a. User can use the first 3 numbers of the material code if known
    b. User can start typing the name of the type of the material
6. Enter in the **Witnessed by**
    a. This is by user last name
    b. If the user completes the record for another inspector, the other inspector's name needs to be used
7. In **Specimen(s) Number**, enter specimen number
    a. Verify the specimen number so that there are not duplicate sample numbers
8. Enter in the **Intended Use**
    a. This information is what the sample represents.
        i. CAC, CTB, Concrete aggregate, bedding, granular, ect
        ii. It is extremely important that the correct material code is used. If is unknown what the material represents, ask the contractor.
9. Enter the **District/Area**
    a. This is where the user is from, not where the sample is going.
10. **Control Type and Control Number** can be used, but it is not a requirement.
11. Enter in any **Remarks** as appropriate.
    a. Multiple rows can be used
12. Navigate to the **Sources/Facilities Tab**

Note: This material is a Source Required Material. The user will get an error if they try to save prior to the Sources/Facilities Tab.

Sources/Facilities Tab

13. Click on the **Sources/Facilities Tab**
14. Click on the **Select Primary Source** button
15. In the search box, **enter the source** the material is coming from
    a. User can place the cursor in the box and hit enter or click on the Show first 10 link
16. Click on the **Add to Sample Record** after choosing the supplier
17. **Save**

Sample Location Tab

18. Click on the **Sample Location Tab**
19. Fill in the information in the **Sampled From** field.
    a. This field will need to be filled out for every record
    b. **Example**: Stockpile by Ronald McDonald, Windrow by dump man of KR
20. Save

Destination Lab(s) Tab

21. Select the **Destination Lab(s) tab**
22. Select **New**
23. Enter in the **date** the material was sampled/tested
24. Click on the **Lab Name** and enter **FIELD CREW**
    a. This is the chain of custody. This allows for sample tracking
    b. If a field crew has sampled or tested the material, FIELD CREW HAS TO BE ADDED
25. Click **New** again
26. Enter the information for the lab
27. **Save**

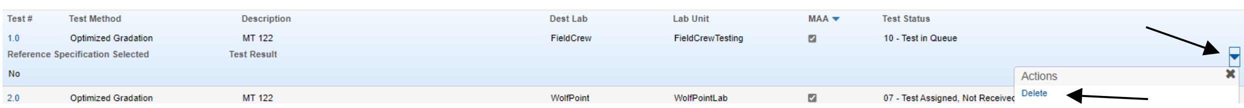
Contract Tab

28. **Select the Contract Tab**
29. Click on the **Select Contract Project Item** button
30. Enter in the **contract number** this sample is referenced to
31. **Select the correct bid item(s) that this sample represents**
    a. There can be multiple material sets based on the material that is being submitted
    b. The material set on the right side of the row needs to be noted and the correct item chosen
32. Select the **>** next to the Contract to expand the row
33. Enter in the **Represented Quantity**
    a. This is the **Measured** quantity.
    b. Note the Unit of Measure on the right side
34. Enter the Station(s) in the **Remarks** section
35. **Save**

<u>Test Tab</u>

36. Select the **Test Tab**
37. Click on the **Blue drop arrow** next to Assign Tests and select **Assign Default** tests
38. Add any additional testing as applicable
39. **Save**
40. **Print out a sample label and attach it to the sample prior to submitting the sample for testing**
    a. Click on the white component drop arrow
    b. Select Sample Label

Note: If there is a field test and the field is **not** completing this test information, delete out the test using the blue drop arrow on the row. This will remove the unnecessary tests and save an exception showing up later. Only Field crews can delete out field tests, lab(s) can delete out the appropriate lab tests.



IAC samples should not be made by the field crew unless the lab has directed otherwise. The lab(s) will create these when they receive the sample that needs the IAC.

4. Creating an Emulsified/Binder Record

1. From the Home Dashboard Navigate to the Sample Records Row
2. Select the white component arrow on the blue component ribbon
    a. Located next to the Save button
3. Select the Add link

<u>General Tab</u>

4. Enter the **Sample Date**
    a. This is the date the sample taken
5. Enter in the **Material Code – Name**
    a. User can use the first 3 numbers of the material code if known
    b. User can start typing the name of the type of the material or
    c. User can place the cursor in the box and hit enter
6. Enter in the **Witnessed by**
    a. This is by user last name
7. **In Specimen(s) Number**, enter specimen number
    Example:
    a. 1-1A, 2-2A ect (Tack)
    b. Lot 1, 1-6A (PG Binder)
8. Enter in the **Intended Use**
    a. This information is what the sample represents.
        i. Chip Oil/ PG binder ect
9. Enter the **District/Area**
    a. This is where the user is from, not where the sample is going
10. **Control Type and Control Number** can be used, but it is not a requirement.
    a. Using the Bill of Lading control type is appropriate
    b. Use the Bill of Lading/ Invoice number for the control number
11. Enter in any **Remarks** as appropriate.
    a. Multiple rows can be used
    b. If the control type/ control number is not used, document the B.O.L/Invoice number here
12. **Navigate to the Sources/Facilities Tab**

<u>Sources/Facilities Tab</u>

13. Click on the **Sources/Facilities Tab**
14. Click on the **Select Primary Source** button
15. In the search box, **enter the source** the material is coming from
    a. User can place the cursor in the box and hit enter or click on the Show first 10 link
16. Click on the **Add to Sample Record** after choosing the supplier
17. **Save**

Sample Location Tab

18. Click on the **Sample Location Tab**
19. Fill in the information in the **Sampled From** field.
    a. This needs to be filled out every time
    b. **Example**: Distributor truck, Tanker by driver
20. **Save**

Destination Lab(s) Tab

21. **Select the Destination Lab(s) tab**
22. Select **New**
23. Enter in the **date** of the material was sampled
24. Click on the **Lab Name** and enter **FIELD CREW**
    a. This is the chain of custody. This allows for sample tracking.
    b. If a field crew has sampled, FIELD CREW HAS TO BE ADDED
25. Click **New** again
26. Enter the **date the sample was given to the Lab**
27. Click on the **Lab Name** and enter the Lab the sample was given to
28. Save

Contract Tab

29. **Select the Contract Tab**
30. Click on the **Select Contract Project Item** button
31. Enter in the **contract number** this sample is referenced to
32. Select the **correct bid item(s**) that this sample represents.
    a. There can be multiple material sets based on the material that is being submitted
    b. The material set on the right side of the screen needs to be noted and the correct item chosen.
33. Select the **>** next to the Contract to expand the row
34. Enter in the **Represented Quantity**
35. **Save**

Test Tab

36. Select the **Test Tab**
37. Click on the **Blue drop arrow** next to Assign Tests and select **Assign Default tests**
38. Print out a sample label and attach it to the sample being submitted for testing
    c. Click on the white component drop arrow
    d. Select Sample label

Note: A sample record needs to be completed for every sample of Emulsified material. Multiple samples should not be added to 1 sample record. Binders are 1 sample record per lot of material per Materials Manual 601 section.

5. Create a Sample Record for Concrete Admixture

A sample record has to be created for **each classification of concrete**. For example, if the contract calls out for General, PCCP & Structure to be used, then 3 records will need to be created.

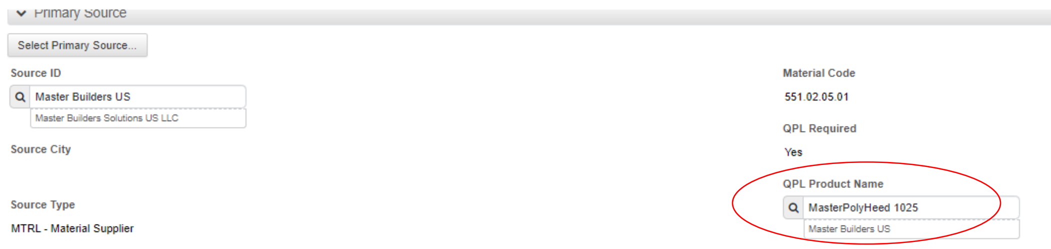
1. From the Home Dashboard Navigate to the **Sample Records** Row
2. Select **the white component arrow** on the blue component ribbon
    a. Located next to the Save button
3. Select the **Add** link

General Tab

4. Enter the **Sample Date**
    a. This can be the current date the certifications were received
5. Enter in the **Material Code – Name**
    a. User can type in the material code (551.02.05.01)
    b. Or user can type in Admixture
6. Enter in the **Witnessed by**
    a. This is by user last name
7. In **Specimen(s) Number**, enter specimen number
8. Enter in the **Intended Use**
    a. This information is what the sample represents
    b. Comment the classification of concrete
9. Enter the **District/Area**
    a. This is where the user is from, not where the sample is going
10. **Control Type and Control Number** can be used, but it is not a requirement.
11. Enter in any **Remarks** as appropriate.
12. Navigate to the **Sources/Facilities Tab**

Sources/Facilities Tab

13. Click on the **Sources/Facilities Tab**
14. Click on the **Select Primary Source** button
15. In the search box, **enter the source** the material is coming from
    a. User can place the cursor in the box and hit enter or click on the Show first 10 link
16. Click on the **Add to Sample Record** after choosing the supplier
    a. For items with BASF on the certification, use MasterBuilder. BASF should not be used
17. Enter the **QPL Product Name**
    a. Only 1 name is needed
    b. This needs to be filled in or it will error
18. **Save**



Destination Lab(s) Tab

19. **Select the Destination Lab(s) tab**
20. Select **New**
21. Enter in the **date** of the certification was received
22. Click on the **Lab Name** and enter **FIELD CREW**
    a. Only Field Crew needs to be entered
    b. This is a field test only and is the responsibility of the field crew
23. **Save**

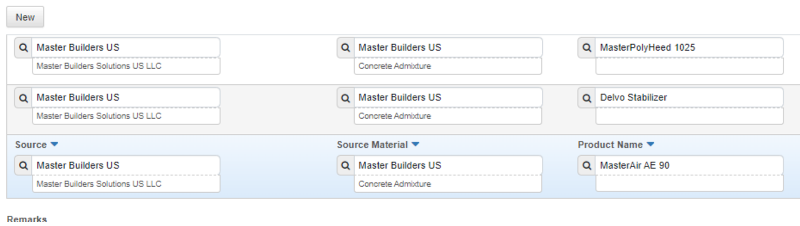
Contract Tab

24. **Select the Contract Tab**
25. Click on the **Select Contract Project** Item button
26. Enter in the **contract number** this sample is referenced to
27. Select **the correct bid item(s)** that this sample represents
    a. User should verify the material set . Either Optimized or Conventional
    b. **Only** select the items that are using that specific concrete classification
28. **Save**

Test Tab

29. Select the **Test Tab**
30. Click on the **Blue drop arrow** next to Assign Tests and select **Assign Default** tests
31. Click on the **blue drop arrow** on the row to open the row actions menu
32. Select the **MDT Admixtures** agency view
33. Select New
    a. In each of the information fields, user can also place their cursor in the field and hit enter to bring up the list.
34. Fill in the **Source**
    a. If it is BASF, use MasterBuilders
35. Fill in the **Source Material**
    a. Select Concrete Admixture
36. Fill in the **Product Name**
    a. User can place their cursor in the field and hit enter or type in the name of the material
    b. User can type in the name of the product
37. Select **New**

38. **Repeat steps 35 – 37 for each admixture**
    a. Portland cement, Blended cement, and Fly ash do **NOT** get added here. They are done in a DWR acceptance record



39. Add Pass to the **Test Result Value** field
40. **Save**
41. Click on the **Sample Record Test Quick link** in the upper left corner under Home
42. Add in the date tested in the **Test Start Date**, **Test Completion** and **Due date** fields
    a. These dates should be the same
43. Click on **the white drop arrow** on the component ribbon
44. Select **Mark test Complete**
45. **Let the FOP/EPM be aware that it is ready to be level 2 authorized**
    a. The FOP will get a notification after 30 days if it is not level 2 authorized.
    b. Best practice is to mark tests complete when they are finished to save time later

General Tab

46. Navigate back to the **Sample Record Summary General Tab**
47. Select **the white drop arrow** on the blue component ribbon
48. Select **Attachments**
49. Select all the Admixture certifications for the specific concrete classification and attach to the record
50. Save

Note: Attachments are not be added in the Agency View or on the Test row in the test tab. The attachments will not show up on the checklist and this also puts the certifications on a Global level. It will show users certifications that do not apply to their contracts.

6. Create a Sample Record for Electrical Items

1. From the Home Dashboard Navigate to the Sample Records Row
2. Select the white component arrow on the blue component ribbon
    a. Located next to the Save button
3. Select the **Add** link

<u>General Tab</u>

4. Enter the **Sample Date**
    a. This can be the current date the certifications were received
5. Enter in the **Material Code – Name**
    a. In the Materials Manual January 09, 2025 version, there are multiple material code electrical items
    b. User needs to verify the Materials Manual, **by their contract letting date**, to see the electrical item material code(s) that will apply to that contract
        i. User can use the Materials Checklist as a secondary check

D			707.02.02.01	Flexible Joint Sealer	75
			Material Code	**Lighting, Signals & Communication (LSM)**	**Page**
D	BAC2		**703.00.00.00**	**Electrical Submittal - Steel and Iron**	76
D	BAC2			Steel Conduit	76
D	BAC2			Pull Boxes - Concrete	76
D	BAC2			Signal Standards Type 2/3	76
D	BAC2			Luminaire Standard Type 10	76
D	BAC2			Signal Standards Type 1	77
D	BABA-C		**703.00.00.01**	**Electrical Submittal - BABA**	77
D	BABA-C			PVC Conduit	77
D	BABA-C			HDPE Conduit	77
D	BABA-C			Optical Cable/Fiber Optics	78
D			**703.00.00.02**	**Electrical Submittal - Manufactured Product**	78
D				Pull Boxes - Composite	78
D				Variable Message Sign	78
D				Antenna	78
D				Conductor	78
D				Cable	78
D				Service & Control Assembly	79
D				Traffic Signal Cabinet	79
D				Traffic Signal Indication	79
D				LED Traffic Signal	79
D				Pedestrian Signal Indication	79
D				Detector Loop	79
D				Pedestrian Push Buttons	79
D				Luminaire Assembly	80
D				Emergency Vehicle Preemption	80
D			**703.00.00.04**	**Electrical Submittal - Other**	80
D				Guys & Anchors	80
	BABA-C		703.14.00.01	Class 4 Treated Wood Poles	80

6. Enter in the **Witnessed by**
    a. This is by user last name
7. In **Specimen(s) Number,** enter specimen number
8. Enter in the **Intended Use**
    a. This information is what the sample represents
9. Enter the **District/Area**
    a. This is where the user is from, not where the sample is going

10. **Control Type and Control Number** can be used, but it is not a requirement.
11. Enter in any **remarks** as appropriate
12. **Save**

__Sources Tab__

13. Click on the **Sources Tab**
14. Click on the **Select Primary Source** button
15. In the search box, **enter the source** the material is coming from
    a. User can place the cursor in the box and hit enter or click on the Show first 10 link
16. Click on the **Add to Sample Record** after choosing the supplier
17. **Save**

__Destination Lab(s) Tab__

18. Select the **Destination Lab(s) tab**
19. Select **New**
20. Enter in **the date** of the certification was received
21. Click on the **Lab Name** and enter FIELD CREW
    a. Only Field Crew needs to be entered
    b. This is a field test only and is the responsibility of the field crew
22. **Save**

__Contract Tab__

23. Select the **Contract Tab**
24. Click on the **Select Contract Project** Item button
25. Enter in the **contract number** this sample is referenced to
26. Select the **correct bid item(s)** that this sample represents.
    a. Per discussion with Mico, user can enter in all the items on the **__approved__** submittal that uses that particular material code
    b. If something in the submittal was rejected by the electrical engineer, then do not select the item)s) on this tab
27. **Save**

__Test Tab__

28. Select the **Test Tab**
29. Click on the **Blue drop arrow** next to Assign Tests and select **Assign Default** tests
30. Click on **blue row action drop arrow on the test row**
31. Select the **MDT Electrical Item Checklist agency view**
32. Select the **bid item(s) that the approved submittal represents**
    a. Per discussion with Mico, user can enter in all the items on the **__approved__** submittal that uses that particular material code

   b. If something in the submittal was rejected by the electrical engineer, then a new sample record will need to be created for the item that was rejected when an approval has been obtained
   c. Do not select any item(s) item that were rejected
33. Enter in a **Test Result Value**
   a. This should say pass if the items have been approved
34. Save
35. Click on the **Sample Record Test Quick link** in the upper left corner under the Home Button

<u>Sample Record Test Summary</u>

36. Enter in the **Test Start Date, Test Completion Date & the Due Date**
   a. These should all be the same date if the certifications were received on the same date
37. Click on the white drop arrow on the blue component ribbon
38. Select **Mark Test Complete**
39. Navigate back to the **General Tab** on the Sample Record Summary

<u>General Tab</u>

40. Select the **white drop arrow** on the blue component ribbon
41. Select **Attachments**
   a. Attachments should have the item number/bid item number noted on each of the pdf certifications.

Example:

42. Select **the correct certification file**
   a. Multiple certifications can be added
   b. User should make sure that the correct certification is uploaded
43. Save
44. Let the FOP/EPM be aware that the sample is ready to be level 2 authorized

7. Create a Sample Record for Steel – Category 1 items

Steel items have specific requirements. The user should verify all documentation and requirements for the specific material being incorporated into the project. In the Materials Manual, Section 3.5.1 designates the difference between Category 1 and category 2 items.

1. From the Home Dashboard Navigate to the Sample Records Row
2. Select the white component arrow on the blue component ribbon
    a. Located next to the Save button
3. Select the Add link

General Tab

4. Enter the **Sample Date**
    a. This can be the current date the certifications were received
5. Enter in the **Material Code – Name**
    a. User can type in the material code, if known or enter in the name of the material
6. Enter in the **Witnessed by**
    a. This is by user last name
7. In **Specimen(s) Number**, enter specimen number
8. Enter in the **Intended Use**
    a. Suggestion to use the type of material the record represents
9. Enter the **District/Area**
    a. This is where the user is from, not where the sample is going
10. **Control Type and Control Number** can be used, but it is not a requirement.
11. Enter in any **remarks** as appropriate.
12. **Save**

Sources/Facilities Tab

13. Click on the **Sources/Facilities Tab**
14. Click on the **Select Primary Source** button
15. In the search box, **enter the source** the material is coming from
    a. User can place the cursor in the box and hit enter or click on the Show first 10 link
16. Click on the **Add to Sample Record** after choosing the supplier
17. **Save**

Destination Lab(s) Tab

18. Select the **Destination Lab(s) tab**
19. Select **New**
20. Enter in the **date** of the certification was received
21. Click on the **Lab Name** and enter FIELD CREW
    a. Only Field Crew needs to be entered

   b. This is a field test only and the responsibility of the field crew

22. **Save**

Contract Tab

23. Select the **Contract Tab**
24. Click on the **Select Contract Project** Item button
25. Enter in the **contract number** this sample is referenced to
26. Select the **correct bid item(s)** that this sample represents.
    a. There will be multiple bid items and material sets
    b. Use caution in selecting the correct bid item(s) and make sure the material set it correct
27. **Save**

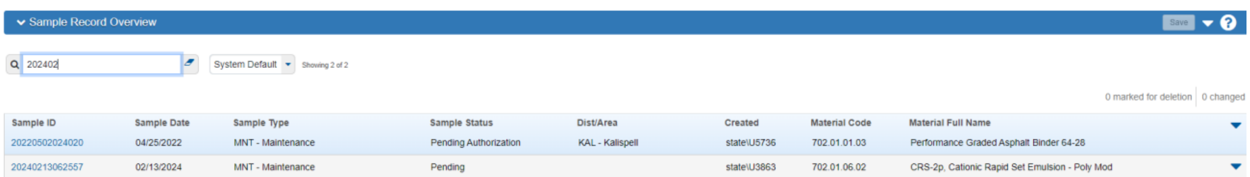
Test Tab

28. **Select the Test Tab**
29. Click on the **Blue drop arrow** next to Assign Tests and select **Assign Default** tests
30. Click on the **blue row action drop arrow** on the test row to open the row actions menu
31. Select the **MDT Heat Numbers agency view**
32. Fill in the **information fields**
33. At the bottom of the screen, enter in the first heat number in the **Heat Number** field
34. Enter in **applicable comments**
    a. **Comment suggestions**: what type of steel item, location, and/or mill information
    b. Steel can have multiple mills and fabricators; it can be beneficial to add this information
35. Select the **New** button
36. **Repeat steps 32 - 34** for each heat number applicable the bid item
37. **Save**
38. Click on the **Sample Record Test Quick link** in the upper left corner under Home
39. Add Pass to the **Test Result Value** field
40. Add in the date tested in the **Test Start Date, Test Completion** and **Due date** fields
    a. These dates should be the same
41. **Save**
42. Click on the **white component drop arrow** on the component ribbon
43. Select **Mark test Complete**
44. Let the FOP/EPM be aware that it is ready to be level 2 authorized
    a. The FOP will get a notification after 30 days if it is not level 2 authorized.
    b. Best practice is to mark tests complete when they are finished to save time later
45. Navigate to the **Sample Record Summary General Tab**
46. Select the **white drop arrow on the blue component ribbon**
47. Select **Attachments**
48. **Select the Admixture certification and attach to the record**
    a. The files have to be uploaded 1 at a time
49. **Save**

8. Delete a Sample Record

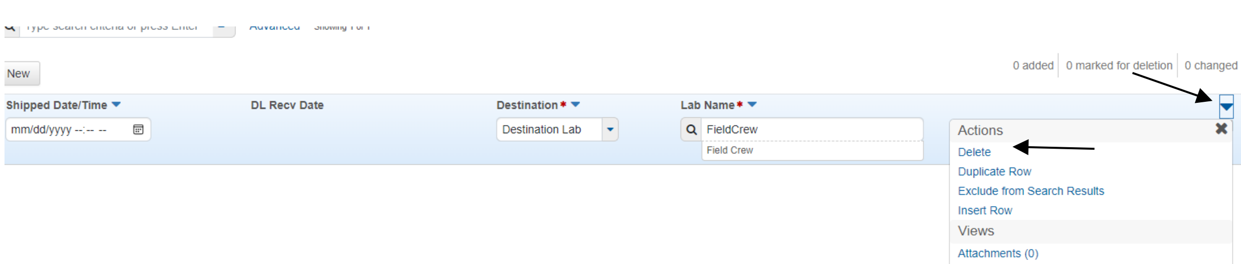
Sample records can be deleted if they are created in error or if they are not needed. It is recommended that the sample be deleted and not voided. The user can use Advance filters to help narrow down the search if the sample ID is not known. See section 11 for directions in setting Advanced Filters.

1. Navigate to the **Sample Record Overview Component**
2. **Enter in the sample ID** number into the search box
    a. Sample record IDs are generated by year/month/date/hour/minute/seconds
    b. The system needs a minimum of 3 digits to start filtering. Use the below format and the user will be able to search for the sample ID
        i. 4 -digit year, 2 – digit month, 2 - digit date (if known)
        ii. **Example**: 20240201

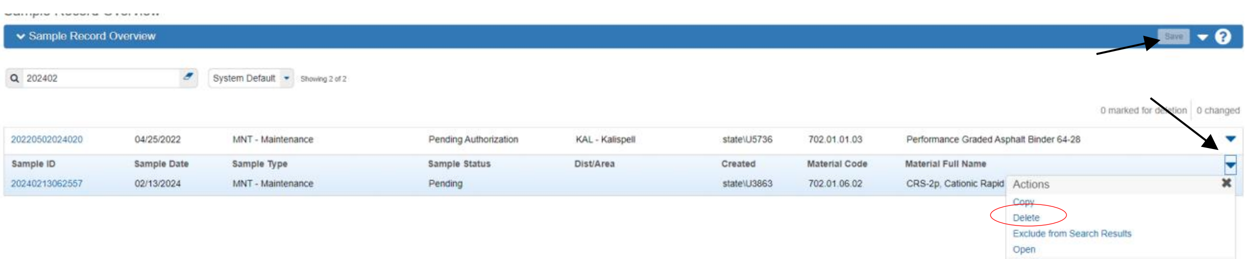


3. Click on the **blue Sample ID number**
4. Click on the **Tests tab**
5. If there are lab tests, the appropriate lab will need to be contacted to delete them.
    a. User can also contact the AASHTOWare help desk to delete
6. Click on **the blue row action arrow** on the test
7. Select **Delete**
    a. This will turn the test row a dark gray
8. **Save**
9. Select the **Destination Lab(s) tab**
10. Click on the **blue row action arrow** next to field crew
11. Select **Delete**
12. **Save**

Note: The Destination labs will have to be deleted. The user will need to contact AASHTOWare help desk or the appropriate lab and ask them to delete the lab row.



13. Click on the **Sample Record Overview quick link** under the Home button
14. Click on the **blue row action arrow** on the sample record
15. Select **Delete**
16. **Save**



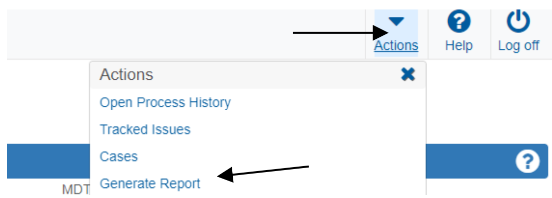
Note: Similar to deleting a Daily work report, the user cannot be in the record to delete. The user needs to be in the overview.

9. Printing a Sample Label

There are multiple ways to print the sample labels. The easiest way to do so is print them from the sample record. However, the user can print from any of the following ways.

Global Actions

1. From the Home dashboard, click on the **Actions** button in the upper right corner
2. Select the **Generate Report** option



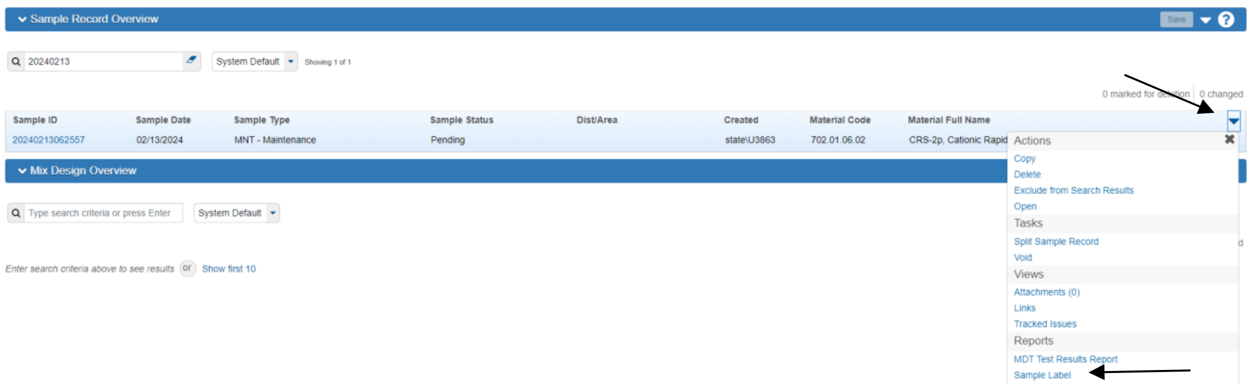
3. Scroll Down to the **Sample Label** row
4. Click on the **Sample Label**
5. Click in the search box and enter the **Sample Record ID** number
6. Click on the **sample record number**
7. Click on the **Execute Button on the Blue component ribbon**
    a. This will open in a new tab at the top of the page

8. Click on **the tab called Generate**
9. Select the **little printer icon** on the tool bar

10. Change the printer type to the **DYMO** printer
    a. In a pdf version, it will be Pinter Settings that will allow the user to change the printer type
11. Select **the quantity of labels to be printed**
12. **Print**

<u>From the Sample Record Overview</u>

1. Enter in the **Sample ID in the search box**
    a. The search function only needs at least 3 numbers to start searching
    b. The more digits of the sample record number, the more it will filter
2. When the sample populates, **select the blue row action arrow**
3. Scroll down to the **Sample Label** under the Reports actions



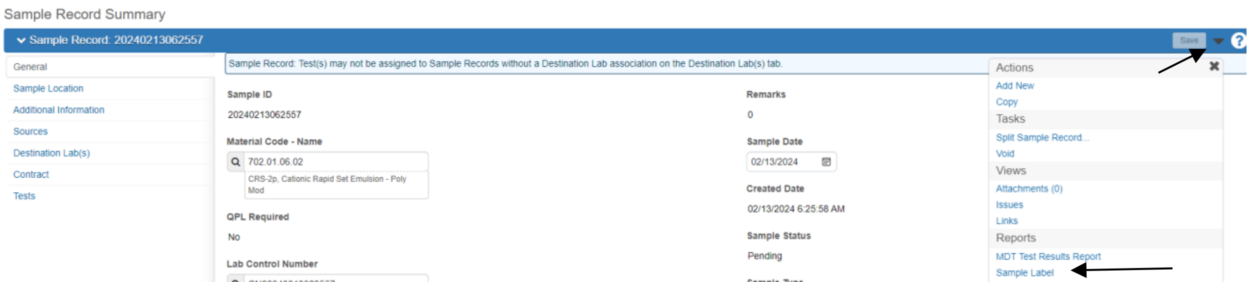
4. In the next screen, click on the **Execute** Button
    a. This will open a new tab at the top of the page
5. Click on the tab called **Generate**
6. Select the **little printer icon on the tool bar**

7. Change the printer type to the **DYMO** printer
    a. In a pdf version, it will be Pinter Settings that will allow the user to change the printer type
8. Select the **quantity of labels** to be printed
9. **Print**

From the Inside of the Sample Record

This is easier if you are currently in the sample record that was just created

1. From inside of the sample record, click on the **white drop component arrow**
2. Scroll down to the **Sample Label** under the Reports actions



3. In the next screen, click on the **Execute** Button
   a. This will open a new tab at the top of the page
4. Click on the tab called **Generate**
5. Select the little printer icon on the tool bar

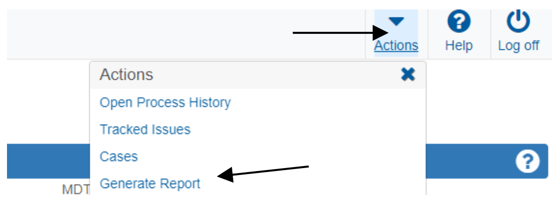
6. Change the printer type to the **DYMO** printer
   a. In a pdf version, it will be Pinter Settings that will allow the user to change the printer type
7. Select the **quantity of labels** to be printed
8. **Print**

10. Print a Sample Tests Report

Like the sample labels, this can be pulled from multiple places. User can print from any of the following ways.

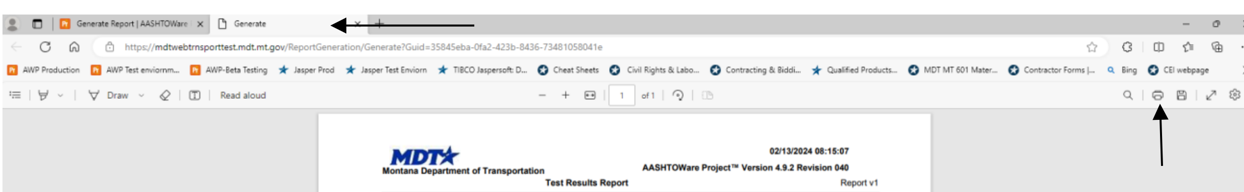
Global Actions

1. From the Home dashboard, click on the **Actions button** in the upper right corner
2. Select the **Generate Report** option



3. Scroll Down to **the Test Results Report** row
4. Click on the **Test Results Report**
5. Click in the search box and enter the **Sample Record ID** number
6. Select the **sample record number**
7. Click on the **Execute Button on the Blue component ribbon**
    a. This will open in a new tab at the top of the page

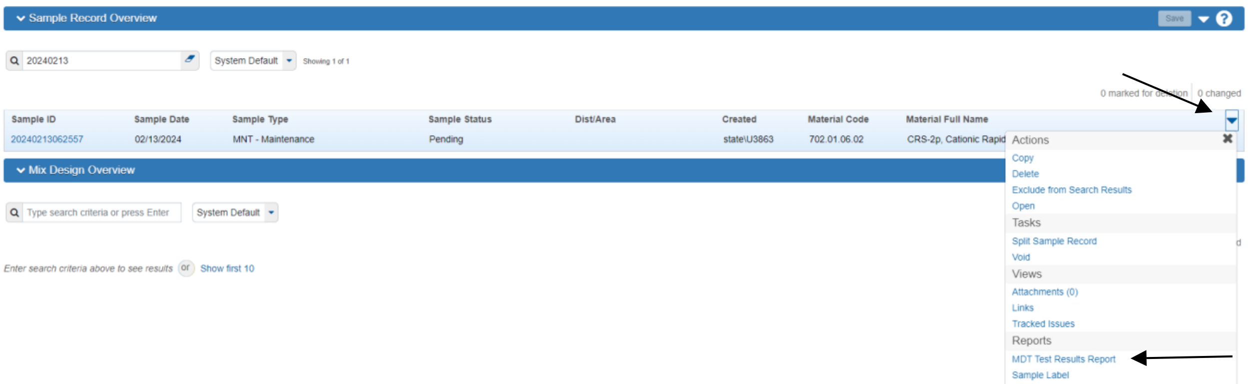
8. Click on the tab called **Generate**
9. Select the little printer icon on the tool bar



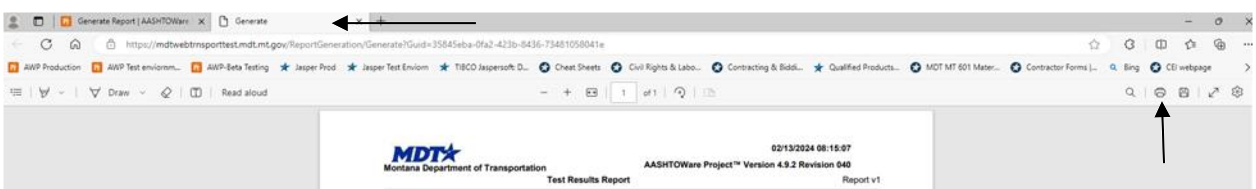
10. Select the **correct printer**
11. Select the **quantity of reports** to be printed
12. **Print**

From the Sample Record Overview

1. Enter in the **Sample ID** in the search box
    a. The search function only needs at least 3 numbers to start searching
    b. The more digits of the sample record number, the more it will filter
2. When the sample populates, select **the blue row action arrow**
3. Scroll down to the **Test Results Report** under the Reports actions



4. In the next screen, click on the **Execute** Button
    a. This will open a new tab at the top of the page
5. Click on the tab called **Generate**
6. Select the **little printer icon** on the tool bar

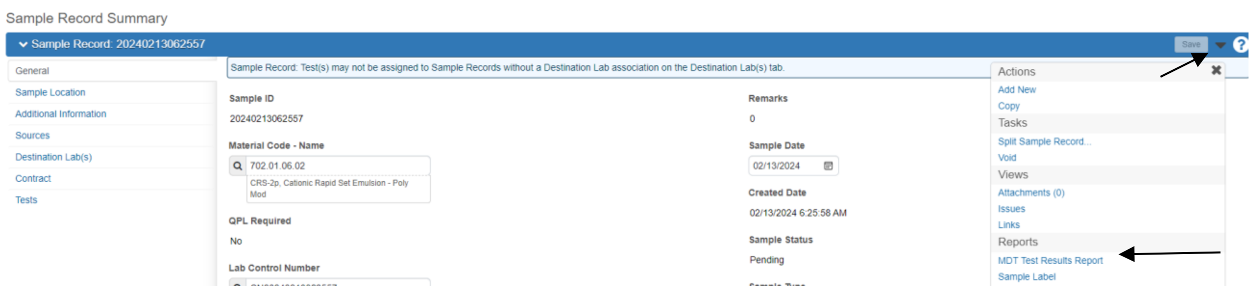


7. Select the **correct printer**
8. Select the **quantity of reports** to be printed
9. **Print**

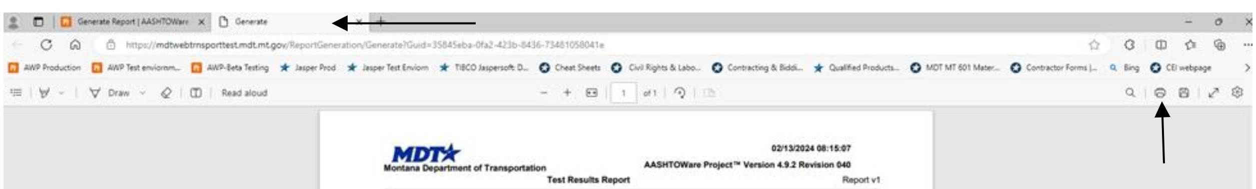
<u>From the Inside of the Sample Record</u>

This is easier if the user is currently in the sample record that was just created

1. From inside of the sample record, click on **the white drop component arrow**
2. Scroll down to the **Test Results Report** under the Reports actions



3. In the next screen, click on the **Execute** Button
   a. This will open a new tab at the top of the page
4. Click on the tab called **Generate**
5. Select **the little printer icon** on the tool bar



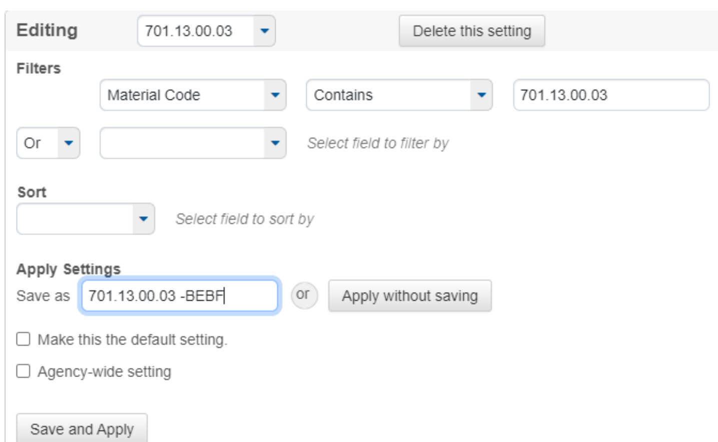
6. Select the **correct printer**
7. Select the **quantity of reports** to be printed
8. **Print**

11. Create an Advanced Filter for Sample Records

Advance filters is a wonderful tool that allows a user to find items quickly within parts of the system they are applied to. Below are basic filters to allow for easy searching.

<u>Create a filter for a material code</u>

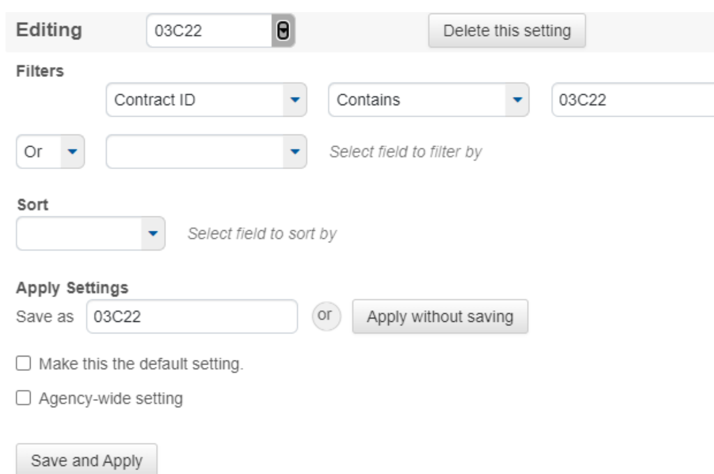
1. Navigate to the **Sample Record Overview**
2. Select the **drop arrow on the System Default** field
   a. This can also be a link called **Advanced**
3. Scroll down to **the Advanced option**
4. In the first field, click on **the drop arrow to show the filtering options**
5. Select **Material Code**
6. In the **blank field**, enter in the material code for the item
7. Scroll **to Apply Setting**
   a. There are 2 options. In the Save As field, this allows the user to keep the filter until the filter is deleted. It is recommended that using a material code or name of the material in this field for easier identification
   b. The user can also use the Apply without saving option. This creates a temporary filter called Temporary. This will have to be modified later or will have to be deleted when the user is completed with the filter.
8. Click on the **Save and Apply Button**



9. This will automatically look for the material code for the user

Create an Advanced Filter for a specific Contract

1. Navigate to the **Sample Record Overview**
2. Select the **drop arrow on the System Default field**
    a. This can also be a link called Advanced
3. Scroll down to the **Advanced** option
4. In the first field, click on **the drop arrow to show the filtering options**
5. Scroll to **Contract**
6. In the blank field, enter in the **contract number**
7. Scroll to **Apply Setting**
    a. There are 2 options. In the Save As field, this allows the user to keep the filter until the filter is deleted. It is recommended that using the contract number in this field for easier identification
    b. The user can also use the Apply without saving option. This creates a temporary filter called Temporary. This will have to be modified later or will have to be deleted when the user is completed with the filter.
8. Click on the **Save and Apply Button**
9. The filter will look specifically for that contract and all sample records associated with it



<u>Create an Advance Filter for a contract and a material code</u>

1. Navigate to the **Sample Record Overview**
2. Select the **drop arrow on the System Default field**
    a. This can also be a link called Advanced
3. Scroll down to the **Advanced option**
4. In the first field, click on **the drop arrow to show the filtering options**
5. Scroll to **Contract**
6. In the blank field, enter in the **contract number**
7. **In the second row, change "Or" to "And"**
    a. This tells the system that it is to be included in the search and not an and/or search
8. In the next field, select **Material code**
9. **In the last field, enter the material code**
    a. For contracts that have a lot of concrete, aggregate or other materials, this works wonderfully to allow for faster searching.
10. Scroll down to the **Apply Settings**
    a. There are 2 options. In the Save As field, this allows the user to keep the filter until the filter is deleted. It is recommended that using a material code or name of the material in this field for easier identification
    b. The user can also use the Apply without saving option. This creates a temporary filter called Temporary. This will have to be modified later or will have to be deleted when the user is completed with the filter.
11. Click on the **Save and Apply Button**