

FIELD - Operations Inspector Casts 28 Day Acceptance Cylinders and Creates Sample Record

(See Appendix For Examples)

1. On the side of the cylinder mold clearly write the sample ID provided by SiteManager, the mix design strength, class of concrete, cylinder number, date made, and contract number for the cylinders.
2. Cast the cylinders in the field.
3. When the cylinders are removed from the mold **transfer/verify** all the information from step 2 on the side of the cylinder.

Now, open and copy the air/slump/temperature sample record. The Following Steps are for SiteManager. **If using the DWR App please refer to the DWR App Guides at: [Site Manager Materials \(tn.gov\)](http://SiteManagerMaterials.tn.gov)**

4. Open the Maintain Sample Information window (Main panel/Materials Management/Sampling and Testing/Sample Information)
5. In the Maintain Sample Information window, on the toolbar, click the **Open** button. Scroll to and double-click the air/slump/temperature sample record.

Tip! If the air/slump/temperature sample record was still open in Maintain Sample Information window, from the **File** menu, select **Refresh** (CTRL + F) to update the sample status.

6. From the **Services** menu, click the **Copy Sample** choice. SiteManager displays the Copy Sample window.
7. Select **Copy lab control number from existing sample. (This step will tie the cylinder sample and the fresh properties sample together)**
8. Click the **OK** button. SiteManager displays the copied sample record in the Maintain Sample Information window. **Verify** all needed data copied over to new sample, add if any is missing. **Make sure "Sample Taken Date" field has correct date that physical cylinder sample was created. HQ lab will use this date to calculate due date for testing cylinders. (See Figure 1, 2, & 3)**

Basic Sample Data		Contract		Other		Tests	
Smpl ID:	j02834228G141222	Status:	Pending				
Revised By:		Revising:		Sample Date:	11/09/22		
Link To:		Link From:		Log Date:	11/16/22		
Smpl Type:	Acceptance	Acpt Meth:	Acceptance				
Material:	604.01.001A	Class:	A, Concrete Mix				
Sampler:	j02834	Hampton:	Chris				
P/S:	B.T. Ready Mix - Jackson					45700003	
Type:	Producer	City:	Brownsville				
Prod Nm:							
Mnfctr:	B.T. Ready Mix - Jackson					45700003	
Town:		Geog Area:	Region 4				
Intd Use:	Sidewalk						
Repr Qty:	30.000	Cubic Yard		Lab Control Number:	CNj028342289085746		
Auth By:		Auth Date:	00/00/00	Lab Reference Number:			
Lock Type:		Locked By:	j02834	Lock Date:	11/16/2022 14:12:37		
	HQ:	<input checked="" type="checkbox"/>					

Figure 1. Maintain Sample Information Window – Basic Sample Data Tab

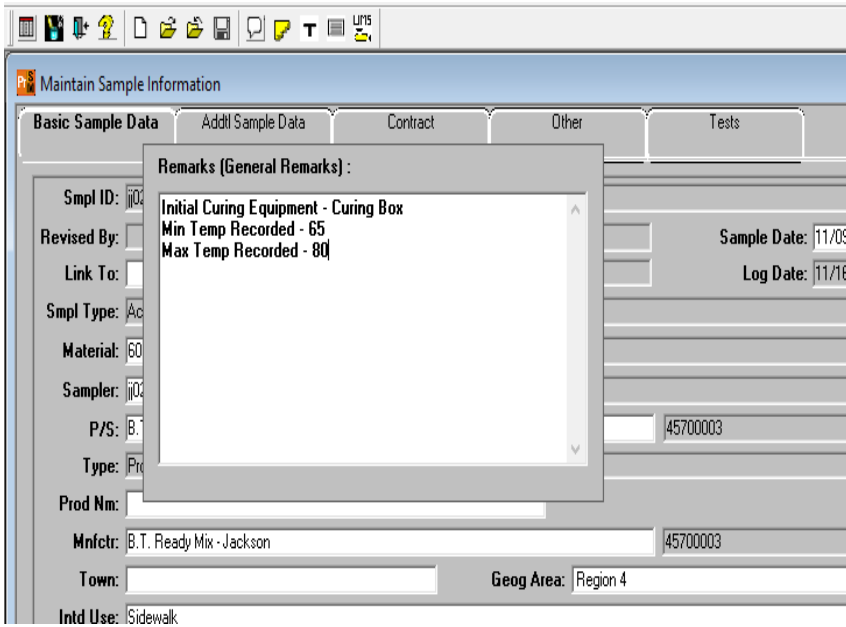


Figure 2. Maintain Sample Information Window – Basic Sample Data Tab (Remarks)

****** Click the remarks button and make sure the additional information below copied over from your copied sample:**

- 1. Initial Curing Equipment**
- 2. Min Temp Recorded**
- 3. Max Temp Recorded**

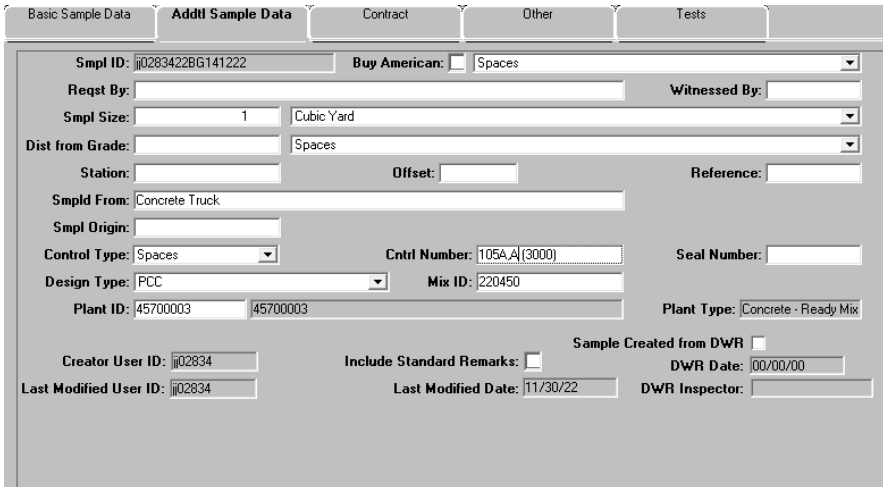


Figure 3. Maintain Sample Information Window – Addtl Sample Data Tab

9. Click the **Addtl Sample Data** tab. The system displays the **Addtl Sample Data** panel. Design type, Mix ID & info in Cntrl Number field should transfer from copied sample. Verify this data is there.

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Below are some details about the the cylinder numbers represented by this sample record.

In the **Control Number**, enter the cylinder numbers and design strength.
Example: 105A,A (3000)

*** Cylinder **Numbers** should be consecutive through the life of the contract. Starting with 1A,1A (A represents acceptance). Only one set (TWO) of 28 day cylinders per sample. A & A should be the only letters used for the life of the contract for acceptance. (For Prestressed concrete 1B, 1B for backup cylinders are acceptable.

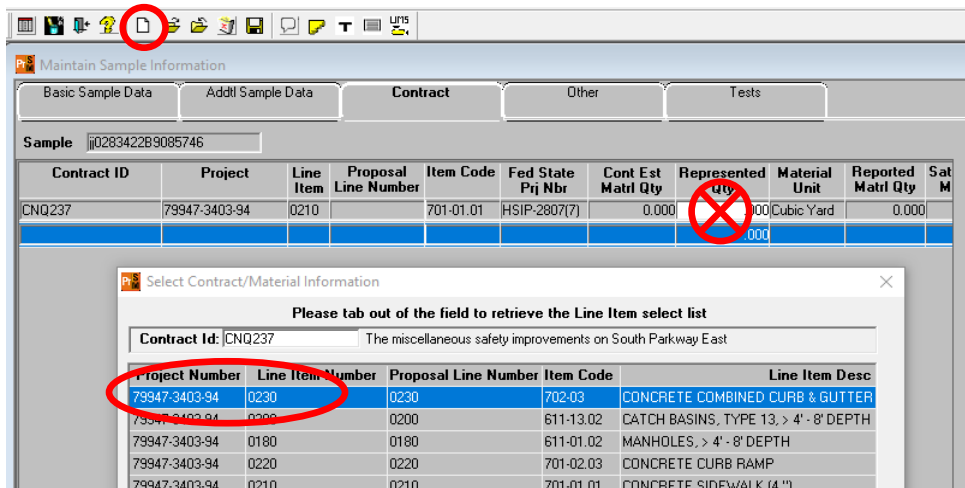


Figure 4. Maintain Sample Information Window – Contract Tab

10. Click the Contract tab. The system displays the Contract panel.
11. Verify this copied sample kept the contract items that the sample represents.
12. Warning! Do not enter a quantity. The quantity to be paid is entered in a DWR. The material has a rate/frequency of testing linked to it, and entering a quantity here will possibly cause a shortage of test results resulting in money being withheld.

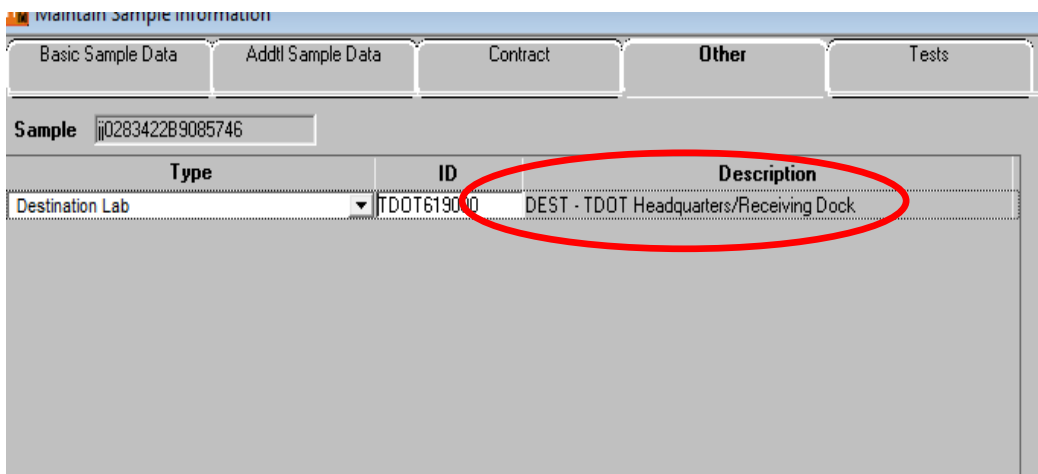


Figure 5. Maintain Sample Information Window – Other Tab

13. Click the **Other** tab. The system displays the **Other** panel.

- Record the location where the testing will be performed.

14. In the **Type** dropdown list, select **Destination Lab** if it is not already populated.

15. In the **ID** field, search for and select **DEST – TDOT Headquarters/Receiving Dock**.

Note: All acceptance Cylinders should ONLY be assigned to the DEST – TDOT Headquarters/Receiving Dock.

Assign tests.

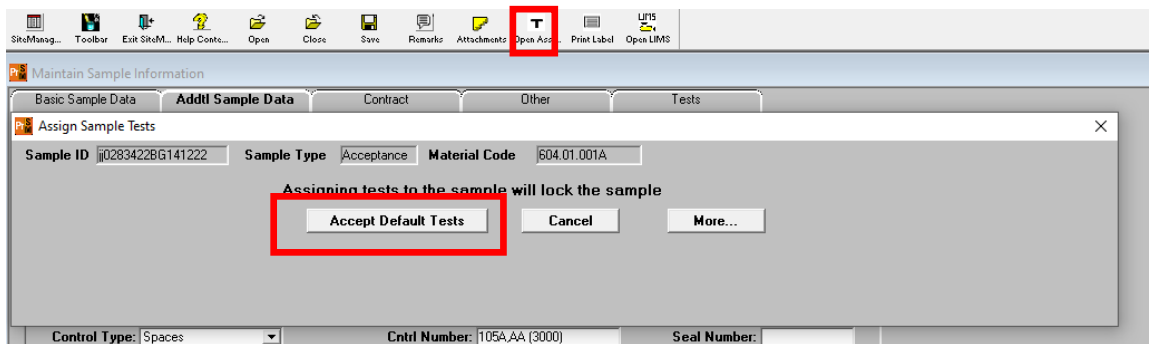


Figure 6. Maintain Sample Information Window – Assign Sample Test

16. On the toolbar, click the **Open Assign Tests** button. The system displays the Assign Sample Tests window.

17. Click the **Accept Default Tests** button. The system associates 'T22 - Compressive Strength of Cylindrical Concrete Specimens' to the sample record.

18. **Save Tests**. The system displays the Maintain Sample Information window's **Other** panel.

19. Set the cylinder aside to cure.

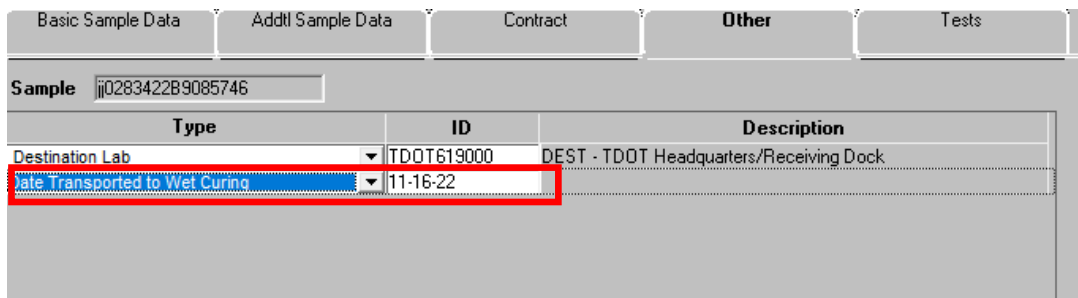


Figure 7. Maintain Sample Information Window – Other Tab

NOTE: The inspector who created the cylinders will be responsible for making sure correct “Date Transported to Wet Curing” is added to the “Other” tab of the sample record when the cylinders are transported.

FIELD - Operations Inspector Prepares and Delivers the Cylinders to the Regional M&T Lab

1. Deliver the cylinders to the Regional M&T lab.
2. Strip the molds from the cylinders.
3. Transfer information from the cylinder mold to the stripped cylinder. (See Appendix)
4. Before cylinders are shipped from the Regional M&T lab to the Headquarters Lab, cylinder samples in SiteManager should be reviewed for accuracy.

HQ Lab performs testing

1. If cylinders break above required strength, no notifications will be sent to Operations or Regional M&T Staff. There are several methods anyone who wants/needs to see the results can access the data
 - i. Open sample record in SiteManager, go to “Tests” tab. Select test T22. Then go to “Services” menu and select “Enter/View Test Results”. Read only version of the test template w/ results will open in new window.

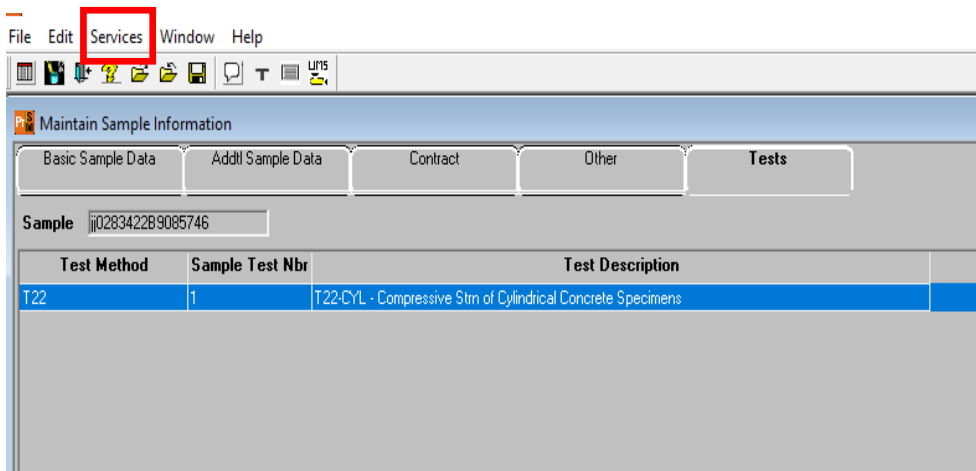


Figure 8. Maintain Sample Information Window – Test Tab

Material Test Template Usage

Sample ID : j0283422B9085746 Test Method : T22 Test Number : 1
Material Code : 604.01.001A Mix Type : PCC Mix Id : 220450
Effective Date: 10/01/12

T22-CYL Compressive Strength of Cylindrical Concrete Specimens

 In Spec
 Out of Spec
 No Spec

Equipment: 61907015 - 1" BEARING BLOCK #1

Procedure: 4x8 Cylinder

Cylinder number	1	2	
Diameter (in)	4.000	4.000	4.000
Cross-sectional Area (sq in)	12.56	12.56	12.56

Calculate By: Maximum Load (lbf)

Figure 8. Maintain Sample Information Window – Test Results

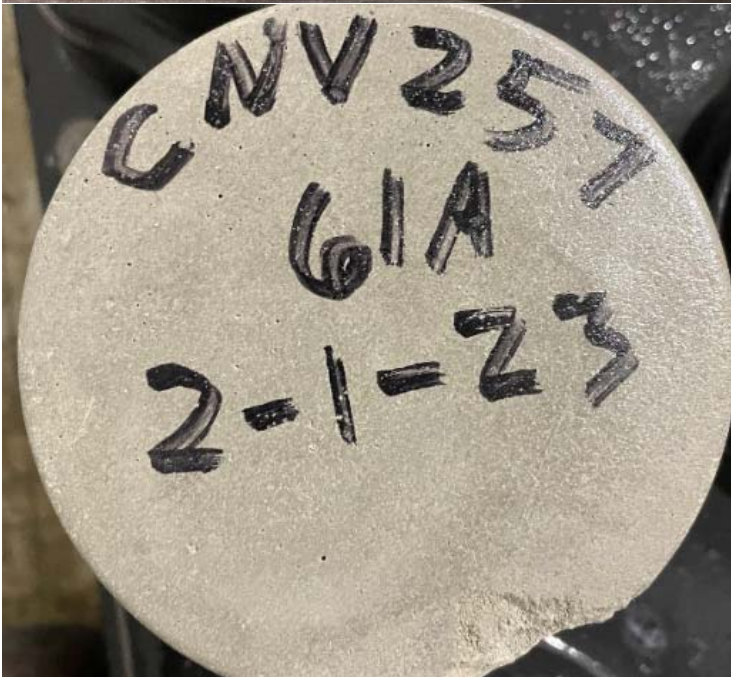
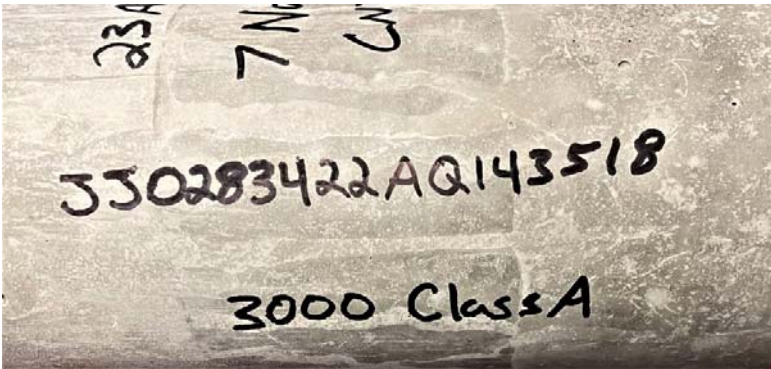
ii. Break info will also be posted online for those without SiteManager access at: <https://www.tn.gov/tdot/materials-and-tests/laboratory-operations.html>

2. If the cylinders break below required strength, automatic notifications will be sent to the Operations unit & Materials & Tests office in charge of the contract.

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Appendix

Example Cylinder Mark Up:



Be sure to transfer the contract number , cylinder number, and date to the smooth end of the cylinder.

23
7 No
CNT

550283422AQ143518

3000 Class A

550283422AQ143518

23A

7 Nov 22

CNT123