

Excavation Items (Embankment) proctor/density/moisture testing

This document outlines the procedure for creating samples of borrow material coming to Regional or HQ Materials and Tests labs for Contract Borrow material proctor/density/moisture testing.

Note: For **aggregate base material** use appropriate material code (903.05.069 for type A grade D or 903.05.074 for type B grade D). This sample will be sent to HQ to be tested. Once the tests are complete, Regional M&T will submit a request for new P/S using the naming layout of "CNX### - Aggregate from Jobsite". They will list all materials this stockpile meets specifications to be used for. Operations will use this P/S for all samples using the material.

Regional M&T will be required to submit quality samples every six months to verify the material is still acceptable. Once the material is no longer being used, or does not meet specific materials quality requirements, Regional M&T will notify HQ M&T to inactivate either the P/S or the material.

Below are screen captures detailing data that needs to be captured in the sample record for **soil samples** using material code **203.02.002**:

Basic Sample Data	Addl Sample Data	Contract	Other	Tests
Smpl ID: ij01349158N145125	Status: Completed			
Revised By:	Revising:	Sample Date: 11/23/15		
Link To:	Link From:	Log Date: 11/23/15		
Smpl Type: Information Only	Acpt Meth: Information Only			
Material: 203.02.002	Borrow (Unclassified)			
Sampler: ij01349	Rader, Dan			
P/S:				
Type:	City:			
Prod Nm:				
Mnfctr:				
Town:	Geog Area: Region 3 - Robertson			
Intd Use: CNP922 Pit #1				
Repr Qty: .000 Cubic Yard	Lab Control Number: CNij01349158N145125			
Auth By: ij01563	Auth Date: 08/25/17	Lab Reference Number: 155267		
Lock Type:	Locked By: ij01349	Lock Date: 11/23/2015 14:55:14		
HQ: <input checked="" type="checkbox"/>	Region: 3			

P/S: If this material is from an existing P/S stockpile, add them to this field (the report can be run for specific P/S and/or specific contract).

Material: Always use 203.02.002 for soil & 903.05.069 or 903.05.074 for base aggregate. The test results will determine what contract item material codes the material can be used for.

Geog Area: Select the Region and county the sample came from.

Intd Use: list the contract number and any other data you would need for the location field of the report.

Basic Sample Data	Addtl Sample Data	Contract	Other	Tests
Smpl ID: <input type="text" value="ji01349158N145125"/>		Buy American: <input type="checkbox"/> Spaces		
Reqst By: <input type="text"/>		Witnessed By: <input type="text"/>		
Smpl Size: <input type="text"/> Spaces				
Dist from Grade: <input type="text"/> Spaces				
Station: <input type="text" value="Site #1"/>		Offset: <input type="text" value="400' R"/>		Reference: <input type="text"/>
Smpld From: <input type="text" value="Batson Farm, Crestview School Rd."/>				
Smpl Origin: <input type="text"/>				
Control Type: <input type="text"/> Spaces		Cntl Number: <input type="text"/>		Seal Number: <input type="text"/>
Design Type: <input type="text"/> Spaces		Mix ID: <input type="text"/>		
Plant ID: <input type="text"/>		Plant Type: <input type="text"/> Spaces		

Enter enough data to tie down the location where the material was sampled from on the Addtl Sample Data tab. NOTE: the next page of this document shows where the info will show up in the BOE "Contract Soil & Aggregate Proctor Report" (RR019a)

Basic Sample Data	Addtl Sample Data	Contract	Other	Tests									
Sample <input type="text" value="ji071551632094530"/>													
<table border="1"> <thead> <tr> <th>Type</th> <th>ID</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Destination Lab</td> <td>TDOT619000</td> <td>DEST - TDOT Headquarters/Receiving Dock</td> </tr> <tr> <td>Contract</td> <td>CNP047</td> <td>Reconstruction on U.S. 27 (S.R. 29) from S.R. 61 in Roane Co</td> </tr> </tbody> </table>					Type	ID	Description	Destination Lab	TDOT619000	DEST - TDOT Headquarters/Receiving Dock	Contract	CNP047	Reconstruction on U.S. 27 (S.R. 29) from S.R. 61 in Roane Co
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In order for the contract number to be available when running the proctor report, the contract must be entered on the "Other" tab.

NOTES FOR RUNNING REPORT RR019a:

1. The same info entered in the "Sampled From" field on the "Addtl Sample Data" tab on more than 1 sample linked to a contract, will make more than 1 test show on a page. This way you could have borrow and embankment show up on 1 page if you enter "jobsite" (or other matching word) in Sampled From field of multiple samples linked to the contract. See example of report with 2 locations at end of this document.
2. If you do not select a P/S, but a sample exists with a contract/material combo that matches what you use to generate your report, it will show up.
3. VERY IMPORTANT: In the "Review Sample" window of LIMS, there are check boxes for Approve or Authorize. If you select Approve, the sample will show up on the report. Plus you will be able to add additional contracts to the sample without having to unauthorize it then add the contract and reauthorize it.

4. "Approve Only" samples do not have an "Authorized date" linked to them. This will cause them to appear before "Authorized" samples. Remove the contract from the sample if the proctor data is no longer valid for the contract and you do not want it to appear on the report.

5. If you only select a material and P/S, it will list all "Info Only" samples from the most recent first to the oldest last.

Print Date: 08/25/2017
JJ01563

**STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
Contract Soil & Aggregate Proctor Report**



Material: 203.02.002 - Borrow (Unclassified)
Producer/Supplier:

Contract ID: CNP922
Sampled From: Batson Farm, Crestview School Rd.

Gradation - Total Percent Passing

Sample ID		jj01349162M143950	jj0134915BN145125
Station/Offset		Site # 4 - 650' RT.	Site #1 - 400' R
Depth			
Location	ft	Contract CNP 922 Bor	CNP922 Pit #1
2"	ft	0	0
1-1/2"	%	0	0
1"	%	98	0
3/4"	%	98	0
3/8"	%	96	0
#4	%	94	100
#10	%	91	99
#16	%	0	0
#40	%	84	96
#100	%	71	89
#200 (Silt and Clay)	%	65	85
Clay	%	43	46

Soil Constants

Lower Liquid Limit	%	48	0
Lower Plastic Limit	%	30	0
Plasticity Index	%	18	0
Calculated Plasticity Index	%	15	0
Type(Group)	%	A-7-5 (11)	0

Density Corrected for +4 Material

Proctor Density	lbs/ft³	103.6	101.0
Optimum Moisture	%	21.5	19.0
95% Density	%	98.4	95.9
Moisture Above Subgrade	%	19-23.8	17-23
Moisture Below Subgrade	%		

