

Method for Field Determination of the Daily Lime Content

1. Scope:

This test covers the determination of the daily lime content for an asphalt hot mix plant.

2. Apparatus:

None

3. Procedure:

3.1 Record the weight of lime in the tank at the start of the day. (**A**)

3.2 Calculate the weight of lime added to the tank by taking the summation of all truckloads of lime received for the day. (**B**)

3.3 Record the weight of lime in the tank at the end of the day. (**C**)

3.4 Record the weight of asphalt hot mix produced for the day. (**E**)

Note: All weights to the nearest 0.01 ton

4. Report:

4.1 Calculate the weight of lime used for the day (**D**) to the nearest 0.01 ton.

$$\mathbf{D = A + B - C}$$

4.2 Calculate the daily percent of lime in the mix (**F**) to the nearest 0.01 percent.

$$\mathbf{F = \left(\frac{D}{E}\right) \times 100}$$

A = Weight of lime in tank at start of day.

B = Weight of lime added to tank.

C = Weight of lime in tank at end of day.

D = Weight of lime used.

E = Weight of mix produced.

F = Percent of lime in mix.

4.3 Report the daily lime content on the DOT-33Q form to the nearest 0.01 percent.

5. References:

DOT-33Q

Sample ID 2245374 **LIME CONTENT DETERMINATION - ASPHALT CONCRETE** DOT-33Q
 File No. _____ 9-14
 Report No. 14
 County Aurora, Ziebach PCN/PROJECT B015
 Test Date 05/03/2016 Inspector Tester, One Contractor Roads, Inc
 Percent Lime Desired 0.90 - 1.10
 Hydrated Lime Type _____

TANK METHOD

A. Weight of Lime in Tank at Start (Tons) 20.55
 Tons at Start (at start of project only)
 B. Weight of Lime Added to Tank (Tons) 68.87
 C. Weight of Lime in Tank at End (Tons) 38.71
 Left in Storage (at end of project only)
 D. Weight of Lime Used (A + B - C) (Tons) 50.71
 E. Weight of Mix Produced (Tons) 4833.21
 F. Percent of Lime in Mix (D / E x 100) 1.05

B.	Load #	Invoice #	Tons
	<u>07</u>	<u>75373</u>	<u>33.63</u>
	<u>08</u>	<u>75955</u>	<u>35.24</u>

Summary of Mix Produced			Lime
To Road	<u>4827.21</u>	Tons	<u>50.65</u>
Plant Waste	<u>5.00</u>	Tons	<u>0.05</u>
Road Waste	<u>1.00</u>	Tons	<u>0.01</u>
To Others	_____	Tons	_____
Produced	<u>4833.21</u>	Tons	

REMARKS