U.S. Department of Transportation
Federal Highway Administration
Federal Lands Highway

WORKSHEET FOR CONTROL OF ASPHALT MIXES
AASHTO T 30, AASHTO T 176, AASHTO T 308, AND ASTM D 5821

Project: Source:

Sample of   Lot No.   Sample No.

Where sampled: Time sampled:

Sampled by: Date: Tested by:

ASPHALT CONTENT BY INGNITION

Oven model: NCAT   Troxler   Other   **Weighing Method:**   External   Internal

Reported Ticket Information
Recorded Data and Calculated Values

A. Furnace chamber set point, ºC

I. Mass of basket assembly & sample before ignition, g

B. Total elapsed time, min:sec

J. Basket assembly tare mass, g

C. Initial sample mass, g

K. Initial sample mass, g   [I - J]

D. Mass loss during ignition, g

L. Mass of basket assembly & residual aggregate, g

E. Percent loss, %

M. Mass of residual aggregate, g   [L - J]

F. Temperature compensation, %

N. Mass of residual aggregate after washing, g

G. Job mix correction factor[1], %

O. Mass lost during washing, No. 200 (75 μm), g   [M - N]

H. Corrected asphalt content, %

P. Final corrected % asphalt by mass of mix

SIEVE ANALYSIS (AASHTO T 30)

Sieve Size	Mass[2] Retained	Percent Retained	Percent Passing	Target Values	Allowable Deviation
1-inch (25 mm)					
¾-inch (19.0 mm)					
½-inch (12.5 mm)					
⅜-inch (9.5 mm)					
No. 4 (4.75 mm)					
No. 8 (2.36 mm)					
No. 10 (2.00 mm)					
No. 16 (1.18 mm)					
No. 30 (600 μm)					
No. 40 (425 μm)					
No. 50 (300 μm)					
No. 100 (150 μm)					
No. 200 (75 μm)					
Pan					
Washed [O]					
Total[3]					
Residual mass [M]					

MOISTURE CONTENT (OVEN METHOD)

Q. Mass of sample + container, initial

R. Mass of sample container

S. Mass of sample, initial   [Q - R]

T. Mass of sample + container, dry

U. Moisture, % $[100 * (Q - T) / S]$

SAND EQUIVALENT (AASHTO T 176)

Cylinder no.

Time (20 min)

Sand reading

Clay reading

Sand equivalent

         Average SE value

FRACTURED FACES (ASTM D 5821)

V. Mass of fractured aggregate, g

W. Mass of non-fractured aggregate, g

X. % fractured, % $[100 * V / (V + W)]$

[1] Individual oven aggregate correction (calibration) factor.
[2] All masses are in grams.
[3] Total mass should be within 0.2% of the mass of residual aggregate.