IA Checklist
OHD L-14
Method 1 – Density of Compacted Specimens (LAB MOLDED SPECIMENS) Determination of Bulk Specific Gravity and Percent Absorption of Compacted Specimens

Procedure		P	F	NA
1	Cool Specimen to room temperature. (77º +/- 9º)			
2	Weigh specimen in air to the specified tolerance, (0.1 % of sample mass) and, record weight.			
3	Tare scales, with weighing apparatus attached.			
4	Bring water to specified temperature. (77º +/- 1.8º)			
5	Submerge specimen in water and take a reading of the weight after 4 +/- 1 minute. Record weight to 0.1% of sample mass.			
6	Surface dry specimen with a damp towel immediately and weigh within specified tolerance, 0.1% of sample mass. Record weight.			

Calculate the bulk specific gravity of the specimen as follows (round and report the value to the nearest 0.001 gram):

$$G_{mb} = \frac{A}{B - C}$$

Where:

G_{mb}	=	Bulk Specific Gravity
A	=	Dry weight of specimen in air
B	=	Weight of surface-dry specimen in air
C	=	Weight of specimen in water

NOTE: The Bulk Specific Gravity of a lab-molded specimen is commonly referred to as the Lab-molded Specific Gravity. The Bulk Specific Gravity of a roadway core is commonly referred to as the Core Specific Gravity.

Calculate the percent water absorbed by the specimen on a volume basis as follows:

$$\%\ Water\ Absorbed\ by\ Volume = \frac{B - A}{B - C}\ x\ 100$$

Remarks: