LAB WORKSHEET   (note: this data will not be put into the computer)

G_{mm} Test

$$G_{mm} = \frac{W \times R}{W + W1 - W2}$$

The table below does this calculation line by line for you

1	Pycnometer No.		
2	Weight (container & sample)		
3	Weight (container)		
4	Sample Weight, (line 2 - line 3)	W	
5	Weight Pyc & water @ test temp.	W1	
6	Total Weight (line 4 + line 5)	W + W1	
7	Weight pyc & sample & water	W2	
8	Weight displaced water (line 6 - line 7)		
9	Test temp of water, (Deg F)		
10	R multiplier (from chart)		
11	Gmm = (Line 4 x Line 10) / Line 8		

G_{mb} Test (on laboratory specimen)

Two G_{mb}'s would be tested on each box and the results averaged. If you split a box with someone, record your G_{mb} and your partners G_{mb} and determine the average of the two tests.

$$G_{mb} = \frac{W1}{W3 - W2}$$

W1 = mass of sample

W2 = mass of sample in water

W3 - mass of sample in air, SSD

Your G_{mb}	Your partner's G_{mb}

Average G_{mb} =	

Laboratory Air Voids

Use your G_{mm} and the average G_{mb} to calculate air voids.

$$P_a \text{ (lab)} = \left(\frac{G_{mm} - G_{mb}}{G_{mm}} \right) x100$$

TESTING CORES

Core # that you tested:

Thickness of Core:

$$G_{mb} = \frac{W1}{W3 - W2}$$

W1 = mass of sample

W2 = mass of sample in water

W3 - mass of sample in air, SSD