

SOIL MECHANICS TESTING FACILITY
SPECIFIC GRAVITY WORK SHEET

	Temperature T_x , Deg. C	Weight in grams	Pycnometer Number	Laboratory Number
1	Pycnometer 1/3 full of water plus soil		$G_s = \frac{W \times F^*}{W_2 + W_1 - W} = \frac{(\text{③}) \times (\text{⑤})}{(\text{⑦})}$	
2	Pycnometer 1/3 full of water			
3	Soil, (W) = (1)-(2)			
4	Pycnometer full of water at T_x , (W_2)			
5	$W_2 + W = (4)+(3)$			
6	Pycnometer full of water plus soil at T_x , (W_1)			
7	$W_2 + W_1 - W = (5)-(6)$			

	Temperature T_x , Deg. C	Weight in grams	Pycnometer Number	Laboratory Number
1	Pycnometer 1/3 full of water plus soil		$G_s = \frac{W \times F}{W_2 + W_1 - W} = \frac{(\quad) \times (\quad)}{(\quad)}$	
2	Pycnometer 1/3 full of water			
3	Soil, (W) = (1)-(2)			
4	Pycnometer full of water at T_x , (W_2)			
5	$W_2 + W = (4)+(3)$			
6	Pycnometer full of water plus soil at T_x , (W_1)			
7	$W_2 + W_1 - W = (5)-(6)$			

	Temperature T_x , Deg. C	Weight in grams	Pycnometer Number	Laboratory Number
1	Pycnometer 1/3 full of water plus soil		$G_s = \frac{W \times F}{W_2 + W_1 - W} = \frac{(\quad) \times (\quad)}{(\quad)}$	
2	Pycnometer 1/3 full of water			
3	Soil, (W) = (1)-(2)			
4	Pycnometer full of water at T_x , (W_2)			
5	$W_2 + W = (4)+(3)$			
6	Pycnometer full of water plus soil at T_x , (W_1)			
7	$W_2 + W_1 - W = (5)-(6)$			

* Ratio of density of water at test temperature, T to the density of water at 20°C.

Completed by _____ Date _____ Checked by _____ Date _____

Computed by _____ Date _____ Recorded by _____ Date _____