

LABORATORY COMPACTION CHARACTERISTICS OF SOIL (COMPACTION TEST)

1. PROJECT		2. EXCAVATION NUMBER		3. SAMPLE NUMBER		4. DATE	
		5. LAYERS/BLOWS PER LAYER /		6. WEIGHT OF TAMPER (<i>lb</i>)		7. HEIGHT OF DROP (<i>in</i>)	
		8. SPECIFIC GRAVITY OF SOLIDS, G_s		9. DIAMETER OF MOLD (<i>in</i>)		10. VOLUME OF SOIL SAMPLE (<i>cu ft</i>)	
		0.0333 cu ft			0.0750 cu ft		
11. RUN NUMBER	UNITS						
12. WEIGHT OF MOLD + WET SOIL	Grams						
13. WEIGHT OF MOLD	Grams						
14. WEIGHT OF WET SOIL (12 - 13)	Grams						
15. WET UNIT WEIGHT, γ_{wet} ((14/453.6)/10)*	Pcf						
16. TARE NUMBER							
WEIGHT OF TARE + WET SOIL	Grams						
a. WEIGHT OF TARE + DRY SOIL	Grams						
b. WEIGHT OF WATER, W_w (a - b)	Grams						
c. WEIGHT OF TARE	Grams						
d. WEIGHT OF DRY SOIL, W_s (b - d)	Grams						
e. WATER CONTENT, $w = \frac{W_w}{W_s} \times 100$	Percent						
f. (c / e x 100)							
17. AVERAGE WATER CONTENT	Percent						
18. DRY UNIT WEIGHT, $\gamma_d = \frac{\gamma_{wet}}{1+(w/100)}$	Pcf						
19. REMARKS		* This formula contains the conversion from grams to pounds. Omit the conversion factor if the unit weight used is not grams.					
20. TECHNICIAN <i>(Signature)</i>		21. COMPUTED BY <i>(Signature)</i>			22. CHECKED BY <i>(Signature)</i>		