

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>) <div style="display: flex; justify-content: space-between; width: 100%;"> <input type="text" value="0.0333"/> cu ft <input type="text" value="0.0750"/> cu ft </div>			
11. RUN NUMBER	UNITS												
12. WEIGHT OF MOLD + WET SOIL	Grams												
13. WEIGHT OF MOLD	Grams												
14. WEIGHT OF WET SOIL <i>(12 - 13)</i>	Grams												
15. WET UNIT WEIGHT, γ_{wet} <i>[(14/453.6)/10]*</i>	Pcf												
16. TARE NUMBER													
a. WEIGHT OF TARE + WET SOIL	Grams												
b. WEIGHT OF TARE + DRY SOIL	Grams												
c. WEIGHT OF WATER, W_w <i>(a - b)</i>	Grams												
d. WEIGHT OF TARE	Grams												
e. WEIGHT OF DRY SOIL, W_s <i>(b - d)</i>	Grams												
f. WATER CONTENT, $w = \frac{W_w}{W_s} \times 100$ <i>(c / e x 100)</i>	Percent												
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>)							