

U.S. Army Corps of Engineers (USACE)

**COMPACTION TEST**

For use of this form, see EM 1110-2-1906; the Proponent agency is CECW-EC.

**Purpose:** This form is used to document compaction tests.

Date: \_\_\_\_\_

Project: \_\_\_\_\_

Boring No.: \_\_\_\_\_ Sample No.: \_\_\_\_\_

Mold No.	inch diam mold	Volume of mold, V, in cc = asd
----------	----------------	--------------------------------

Mold constant, C = 62.4/ V=	Initial water content, w <sub>0</sub> =
-----------------------------	---

blows per each of	layers, with	lb rammer	inch drop
-------------------	--------------	-----------	-----------

Specimen No.						
--------------	--	--	--	--	--	--

Preparation of Specimen						
-------------------------	--	--	--	--	--	--

100 + W <sub>0</sub>						
----------------------	--	--	--	--	--	--

Weight in Grams	Oven - dry soil	W <sub>S</sub>				
	Wet Soil = W <sub>S</sub> (100 + W <sub>0</sub> )/100	W <sub>0</sub>				
	Tare					
	Tare plus wet soil					

Test water content	W	%	%	%	%	%
--------------------	---	---	---	---	---	---

Water added = in cc	W <sub>S</sub> (w-w <sub>0</sub> )/100					
------------------------	--	--	--	--	--	--

Compacted specimen

Weight in Grams	Mold plus wet soil					
	Mold tare					
	Wet soil	W				
	Dry Soil = 100w / 100 + w	W <sub>S</sub>				

Water content = (W - W <sub>S</sub> ) / W <sub>S</sub> x 100	W	%	%	%	%	%
--	---	---	---	---	---	---

lb per cu ft	Wet unit wt = CW	Y <sub>m</sub>				
	Dry unit wt = CW <sub>S</sub>	Y <sub>d</sub>				

Water content determinations

Specimen No.						
--------------	--	--	--	--	--	--

Tare No.						
----------	--	--	--	--	--	--

Weight in Grams	Tare plus wet soil					
	Tare plus dry soil					
	Water	W <sub>w</sub>				
	Tare					
	Dry soil	W <sub>S</sub>				

Water content = W <sub>w</sub> / W <sub>S</sub> x 100	W	%	%	%	%	%
---	---	---	---	---	---	---

Remarks

Technician: \_\_\_\_\_ Computed By: \_\_\_\_\_ Checked By: \_\_\_\_\_