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U.S. Army Corps of Engineers (USACE)

UNCONFINED COMPRESSION TEST

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

Purpose: The purpose of this form is to document unconfined compression tests.

1. Project:	2. Date:
3. Boring No.:	4. Sample No.:
5. Specimen No.:	6. Classification:

7. Tare Number				d. Height	H_o	Inches	H_o	cm.	
a.	(1) Tare Plus Wet Specimen			e. Average Diameter	D_o	Inches	D_o	cm.	
Weight In Grams	(2) Tare Plus Dry Specimen			f. Initial Area	A_o	Sq. in.	A_o	Sq. cm.	
	(3) Water	W_w		g. Volume In cc = A_oH_o			V_o		
	(4) Tare			h. Volume Of Solids In cc, = W_s / G_s			V_s		
	(5) Wet Specimen	W		i. Void Ratio, $(V_o - V_s) / V_s$			e_o		
	(6) Dry Specimen	W_s		j. Saturation In %, $G_sW_s + e_o$			S_o	%	
b. Water Content		w	%	k. Dry Density, lb/cu ft, 62.4 $(W_s + V_o)$			Y_d		
c. Specific Gravity Of Solids		G_s							

NOTE: If only a portion of the specimen is used for the water content determination $W_s = W + (1 + W_o / 100)$

8a. Elapsed Time In Minutes	b. Dial Reading 10" in.	c. Cumulative Change ΔH 10" in.	d. Proving Ring Dial Reading 10" in.	e. Axial Load, P lb.	f. Axial Strain ε = ΔH/H_o	g. 1- ε	h. A'corr =A_O/ 1- ε (sq cm)	i. Compr. Stress (P/A'corr) x 0.465 (tons / sq.ft.)

9. Remarks	10. Type Failure

11a. Technician (*Last, First Mi*)	b. Date	c. Technician's Signature
12a. Computed By (*Last, First Mi*)	b. Date	c. Computed By Signature
13a. Checked By (*Last, First Mi*)	b. Date	c. Checked By Signature