UNCONFINED COMPRESSION TEST

DATE

PROJECT	EXCAVATION NUMBER	SAMPLE NUMBER

PROVING RING DIAL NUMBER	PROVING RING NUMBER	CALIBRATION CURVE NUMBER
PROVING RING CONSTANT, K_r	**VERTICAL DIAL NUMBER**	**RATE OF LOAD APPLICATION**

FORMULAS

$$\text{Area} = \frac{D^2}{4} = \frac{C^2 D}{4} \qquad \text{Corrected Area, } A = \frac{A_o \text{ (sq. ft.)}}{1 - E} \qquad \text{Unit Strain, } E = \frac{\Delta L}{L_o} \qquad \text{Unit Stress} = \frac{P \text{ (lb.)}}{A \text{ (sq. ft.)}}$$

INITIAL MEASUREMENTS ON SAMPLE				AVERAGE AREA, A_o	
	DIAMETER, D *(in.)*	CIRCUMFERENCE, C *(in.)*	AREA *(sq. in.)*	SQ. IN.	SQ. FT.
TOP					
TOP				HEIGHT, L_o *(in.)*	
BOTTOM					

ELAPSED TIME *(min.)*	PROVING RING DIAL READING *(0.0001 in.)*	LOAD, P *(lb.) (Ring Dial x K_r, or from calibration curve)*	VERTICAL DIAL READING *(in.)*	VERTICAL DIAL DIFFERENCE, ΔL *(in.)*	UNIT STRAIN, E *(in./ in.)*	CORRECTED AREA, A *(sq. ft.)*	UNIT STRESS *(lb./ sq. ft.)*

WATER CONTENT *(%)*	UNCONFINED COMPRESSIVE STRENGTH, q_u *(lb./ sq. ft.)*

REMARKS AND CALCULATIONS *(Use reverse side, if more space is needed)*

TECHNICIAN *(Signature)*	COMPUTED BY *(Signature)*	CHECKED BY *(Signature)*