

LABORATORY MOISTURE - DENSITY RELATIONSHIP
DOTD TR 418 - Methods A & B
(English)

PROJECT NO: _____ DATE: _____ LAB NO: _____

*TYPE ADDITIVE: _____ TYPE SOIL: _____ SAMPLE NO: _____

TESTED BY: _____ CHECKED BY: _____

*MAX. DRY DENSITY OF SOIL (__ TR 418-A, __ TR 415-A), lb/ft ³	A	
*REQUIRED % BY VOL. OF ADDITIVE (__ TR 432-A, __ TR 432-B, __ TR 416, __ specified)	B	
*% WT. OF ADDITIVE (__ chart, __ formula)	C	
DRY WT. OF SOIL (Representative portion), lb	D	
*WT. OF ADDITIVE TO BE ADDED, lb	E	(C x D) + 100
*TOTAL DRY WT. OF SOIL AND ADDITIVE, lb	F	D + E

* FOR USE WITH DOTD TR 418, METHOD B ONLY.

CURVE POINT NO.	***		1	2	3	4	5	6
MOISTURE CUP NO.	***							
WATER ADDED, mL	G	See Calculations						
WT. MOLD, BASE (if appl.) & WET SOIL, lb	H							
WT. MOLD & BASE (if applicable), lb	I							
WT. WET COMPACTED SOIL, lb	J	H - I						
WT. OF CUP & WET SOIL, g	K							
WT. OF CUP & DRY SOIL, g	L							
WT. OF WATER, g	WW	K - L						
WT. OF CUP & DRY SOIL, g	L							
WT. OF CUP, g	M							
WT. OF DRY SOIL, g	DW	L - M						
WET DENSITY, lb/ft ³	WWD	J x 30						
MOISTURE CONTENT, %	MC	(WW/DW) x 100						
DRY DENSITY, lb/ft ³	DWD	$\frac{WWD}{100 + MC} \times 100$						

REMARKS: _____

