DENSITY TEST WORKSHEET - VOLUME MEASURE

North Dakota Department of Transportation, Materials & Research Division

SFN 2454 (Rev. 08-2015)

Project Number	PCN	Date	Tested By

TEST IDENTIFICATION		Test Number					
		Time					
		Station					
		Offset from centerline					
		Lane					
		Depth below finished grade ft.					
IN-PLACE TEST VOLUME MEASURE	a	Final volume reading cu.ft					
	b	Initial volume reading cu.ft.					
	c	Volume of hole = (a - b) cu.ft					
	d	Wet weight of soil lbs.					
	e	Wet density = (d/c) lbs./cu.ft.					
	f	Moisture %					
	g	Dry density = $\frac{e \times 100}{100 + f}$ lbs./cu.ft.					
MOISTURE-DENSITY RELATIONSHIP TEST		ND procedure					
		Test Number (Proctor test)					
		Station					
		Offset from centerline					
		Depth below finished grade ft.					
	h	Maximum dry density lbs./cu.ft.					
	i	Optimum moisture %					
REQUIRED MOIS.-DENS.	k	Required % maximum dry density					
	l	% Maximum dry density = (g/h) x 100					
	m	Required moisture %					
	n	Moisture = f %					
MOISTURE DETERMINATION		Container ID					
	p	Wet weight + container g					
	q	Dry weight + container g					
	r	Moisture loss = (p - q) g					
	s	Tare weight of container g					
	t	Dry weight of soil = (q - s) g					
	f	Moisture = (r/t) x 100 %					

Remarks: _____