

SOILS/SOIL-AGGREGATE

Metric / English (M or E - Located on MATT Menu)

Project No. [] Material Code [] Lab. No. []
Date Sampled [] Submitted By [] Quantity []
Purp. Code [] Pit No. [] Spec Code []
Date Tested [] Ident. [] Parish No. []
From Station [] + [] To Station [] + [] Location []
Hole No. [] Depth, m (ft) [] Log Distance, km (mi) []
Item No. [] Sampled by: []
Remarks 1 []

Hydrometer Analysis (DOTD TR 407)
Table with columns: Time, (T) Elapsed Time, Temp °C, (h) Hydro Reading, (C) Correction, Corrected Reading, % Finer, Effect. Grain Size.

RETAINED ON 2.00 mm (10)
RETAINED ON 425 μm (40)
RETAINED ON 75 μm (200)
Table with columns: Size, Mass Retained (Wx), %, (DOTD TR 407)
List of sieve sizes and corresponding mass retained and percentages.

LIQUID LIMIT
PLASTIC LIMIT
% Organic Matter (TR 413)
Liquid Limit (TR 428)
Plasticity Index (TR 428)
Natural Moisture Content, % (TR 403)
Optimum Moisture Content, % (TR 418)
Maximum Density, kg/m³ (lb/ft³) (TR 418)
Laboratory Compaction Method (TR 418)
% Cement (TR 432 or Plans)
% Lime (TR 416)
% Fly Ash
% Other (Additive)
Soil Group (TR 423)
Classification (TR 423)
pH (TR 430)
Resistivity, ohm-cm (TR 429)
Classification Prefix (TR 423)

Remarks 2 []

Tested By: [] Checked By: [] APPROVED BY: []
Date: [] Date: [] DATE: []

Project No: _____
 Sampled By: _____

Lab Number: _____
 Date Rec'd. at Lab. _____

Organic (DOTD TR 413)

Oven Dry Soil & Dish _____
 Mass Dish _____
 Oven Dry Sample (A) _____
 Furnace Dry Soil & Dish _____
 Mass Dish _____
 Furnace Dry Soil (B) _____
 _____ % Organic

$$\frac{A - B}{A} \times 100$$

Tested By: _____ Date: _____
 Check By: _____ Date: _____

Natural Moisture Content (DOTD TR 403)

Mass Container & Wet Soil _____
 Mass Container & Dry Soil _____
 Mass Water _____
 Mass Container _____
 Mass Dry Soil _____
 % Moisture _____

Tested By: _____ Date: _____
 Check By: _____ Date: _____

pH Value (DOTD TR 430)

Time	
15 Minutes	
30 Minutes	
45 Minutes	
60 Minutes	
pH Value	

Tested By: _____
 Date: _____
 Checked By: _____
 Date: _____

Resistivity Value (DOTD TR 429)

Dry Mass of Sample, g _____ Liquid Limit _____ PI _____
 Water Added for Slaking = Dry Mass $\times \frac{(LL - PI)}{100}$ = _____ mL

H ₂ O Added (mL)	Meter Rdg. (OHM - CM)	H ₂ O Added (mL)	Meter Rdg. (OHM - CM)

Minimum Resistivity _____ OHM - CM
 Checked By: _____ Date: _____
 Tested By: _____ Date: _____

Moisture-Density Relationship (DOTD 418, Method _____)

									Dens. Opt. Moist.
Wet Mass Density, kg/m ³ (lb/ft ³)	WWD								
Moisture Content, %	MC								
Dry Mass Density, kg/m ³ (lb/ft ³)	DWD								

Tested By: _____ Date: _____ Checked By: _____ Date: _____

Moisture - Density Relationship (DOTD TR 415, Family)

Wet Mass _____ Zone No. _____
 Moist. Cont. _____ Max. Dry Density _____ Opt. Moisture _____
 Tested By: _____
 Date: _____
 Checked By: _____
 Date: _____