

USACE CERTIFICATE LABORATORY VALIDATION



Beyond Engineering & Testing, LLC

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has demonstrated, by abbreviated audit of its AASHTO accreditation, or by inspection of required records, equipment, procedures, facilities, and/or final reports, its proficiency to perform testing of construction materials, as established by the quality standards of AASHTO R 18 guidance and the requirements of the applicable ASTM standards.

THIS USACE CERTIFICATE OF LABORATORY VALIDATION IS ACCURATE AS OF ITS DATE AND TIME OF **GENERATION:**

03 MAY 2021 AT 18:01 HOURS

ALL METHODS LISTED ON THIS CERTIFICATE OF VALIDATION WILL EXPIRE ON 05/01/2023

PLEASE CONFIRM THE CURRENT VALIDATION STATUS OF THIS LABORATORY USING THE SEARCH FEATURE ON OUR PUBLIC WEBSITE: https://mtc.erdc.dren.mil

> Chad A. Gartrell, PE, Director USACE Materials Testing Center Vicksburg, Mississippi, USA

AGGREGATE

Aggregate - C 29 - Opt - Unit Weight and Voids in Aggregate

Aggregate - D 75 - Opt - Sampling

Aggregate - C 88 - Opt - Sulfate Soundness

Aggregate - C 117 - Req - Material Finer than 75 µm (No. 200) Sieve

Aggregate - C 127 - Req - Specific Gravity & Absorption in Coarse Aggregate Aggregate - C 128 - Req - Specific Gravity & Absorption in Fine Aggregate

Aggregate - C 131 - Opt - Los Angeles Abrasion Resistance on Small-Size Coarse Aggregate

Aggregate - C 136 - Req - Sieve Analysis of Aggregates

Aggregate - E 329 - Opt - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection

Aggregate - C 566 - Opt - Total Moisture Content

Aggregate - C 702 - Opt - Reducing Samples to Testing Size

Aggregate - C 1077 - Opt - Concrete and Concrete Aggregate Testing Standards (Quality Standards)

CONCRETE

Concrete - C 31 - Reg - Making and Curing Test Specimens in the Field Concrete - C 39 - Req - Compressive Strength of Cylindrical Specimens Concrete - C 138 - Reg - Unit Weight and Air Content by Gravimetric

Concrete - C 143 - Req - Slump

Concrete - C 172 - Req - Sampling

Concrete - C 173 - Req - Air Content by Volumetric ***required if C231 not performed*** Concrete - C 231 - Req - Air Content by Pressure ***required if C173 not performed***

Concrete - E 329 - Opt - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection Concrete - C 511 - Opt - Moist Cabinets, Moist Rooms, Water Storage Tanks

Concrete - C 617 - Opt - Capping Cylindrical Specimens

Concrete - C 1064 - Req - Temperature of Concrete

Concrete - C 1077 - Opt - Concrete and Concrete Aggregate Testing Standards (Quality Standards)

Concrete - C 1231 - Opt - Unbonded Caps

ROCK

Rock - D 7012 - Reg - Compressive Strength & Elastic Moduli of Rock Core Specimens

SOILS

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Soils - G 51 - Opt - Measuring pH of Soil for Use in Corrosion Testing
Soils - G 57 - Opt - Field Measurement of Soil Resistivity Using the Wenner Four-Electrode Method
Soils - G 187 - Opt - Measurement of Soil Resistivity Using the Two-Electrode Soil Box Method
Soils - E 329 - Opt - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Soils - D 421 - Req - Dry Preparation for Particle Size Distribution & Soil Constants
Soils - D 422 - Req - Particle Size Analysis
Soils - D 558 - Reg - Moisture-Density of Soil-Cement
Soils - D 698 - Req - Compaction Characteristics by Standard Effort
Soils - D 854 - Reg - Specific Gravity of Soils
Soils - D 1140 - Req - Material Finer than 75 □m (No. 200) Sieve
Soils - D 1557 - Req - Compaction Characteristics by Modified Effort
Soils - D 1883 - Req - CA Bearing Ratio (CBR)
Soils - D 2166 - Req - Unconfined Compressive Strength
Soils - D 2216 - Req - Water Content
Soils - D 2434 - Opt - Permeability of Granular Soils (Constant Head Method) (Withdrawn 2015)
Soils - D 2435 - Req - One-Dimensional Consolidation Properties
Soils - D 2487 - Req - Classification of Soils
Soils - D 2488 - Req - Description & Identification of Soils (Visual-Manual Procedure)
Soils - D 2850 - Req - Unconsolidated, Undrained Strength in Triaxial Compression
Soils - D 2974 - Req - Moisture, Ash, & Organic Matter of Peat & Other Organic Soils
Soils - D 3080 - Req - Direct Shear Test in Consolidated Drained Conditions
Soils - D 3740 - Opt - Soil and Rock Testing Standards (Quality Standard)
Soils - D 4318 - Req - Liquid & Plastic Limits & Plasticity Index
Soils - D 4546 - Req - One-Dimensional Swell or Settlement Potential
Soils - D 4643 - Req - Determination of Water Content of Soil by Microwave Oven
Soils - D 4718 - Opt - Correction of Unit Weight and Water Content for Soils Containing Oversize Particles
Soils - D 4767 - Reg - Consolidated-Undrained Triaxial Compression
Soils - D 4972 - Opt - pH of Soils
Soils - D 5084 - Req - Hydraulic Conductivity using a Flexible Wall Permeameter
Soils - D 6913 - Req - Particle-Size Distribution of Soils Using Sieve Analysis
Soils - D 6938 - Req - Density and Water Content by Shallow Depth Nuclear Method
Soils - D 7928 - Opt - Fine Grain Distribution with Hydrometer
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