



**USACE CERTIFICATE
OF
LABORATORY VALIDATION**



Aviles Engineering Corporation

**5790 Windfern Rd.
Houston, TX,
Shane Ressman
(713) 895-7645**

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:

05 JAN 2024 AT 09:40 HOURS

ALL METHODS LISTED ON THIS CERTIFICATE OF VALIDATION WILL EXPIRE ON 01/04/2026

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

A handwritten signature in black ink, appearing to read "Chad A. Gartrell", is written over a horizontal line.

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

AGGREGATE

Aggregate - C 29 - Unit Weight and Voids in Aggregate
Aggregate - C 40 - Organic Impurities
Aggregate - C 88 - Sulfate Soundness
Aggregate - C 117 - Material Finer than 75 μm (No. 200) Sieve
Aggregate - C 127 - Specific Gravity & Absorption in Coarse Aggregate
Aggregate - C 128 - Specific Gravity & Absorption in Fine Aggregate
Aggregate - C 136 - Sieve Analysis of Aggregates
Aggregate - C 142 - Clay Lumps
Aggregate - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Aggregate - C 566 - Total Moisture Content
Aggregate - C 702 - Reducing Samples to Testing Size
Aggregate - C 1077 - Concrete and Concrete Aggregate Testing Standards (Quality Standards)
Aggregate - D 2419 - Sand Equivalent Value
Aggregate - D 3666 - Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
Aggregate - D 5821 - Percentage of Fractured Particles in Coarse Aggregate

BITUMINOUS

Bituminous - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Bituminous - D 2041 - Theoretical Maximum Specific Gravity & Density (Rice)
Bituminous - D 2726 - Bulk Specific Gravity and Density
Bituminous - D 3203 - Percent Air Voids
Bituminous - D 3666 - Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
Bituminous - D 5444 - Mechanical Size Analysis of Extracted Aggregate
Bituminous - D 6307 - Asphalt Content of Hot-Mix Asphalt by Ignition Method
Bituminous - D 6752 - Bulk Specific Gravity and Density of Comp Asphalt - Automatic Vacuum Sealing Method
Bituminous - D 6925 - Relative Density of Asphalts by Superpave Gyrotory Compactor
Bituminous - D 6931 - Indirect Tensile (IDT) Strength of Asphalt Mixtures

CONCRETE

Concrete - C 31 - Making and Curing Test Specimens in the Field
Concrete - C 39 - Compressive Strength of Cylindrical Specimens
Concrete - C 78 - Flexural Strength by Third Point Loading
Concrete - C 138 - Unit Weight and Air Content by Gravimetric
Concrete - C 143 - Slump
Concrete - C 172 - Sampling
Concrete - C 173 - Air Content by Volumetric ***required if C231 not performed***

Concrete - C 231 - Air Content by Pressure ***required if C173 not performed***
Concrete - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Concrete - C 511 - Moist Cabinets, Moist Rooms, Water Storage Tanks
Concrete - C 617 - Capping Cylindrical Specimens
Concrete - C 1064 - Temperature of Concrete
Concrete - C 1077 - Concrete and Concrete Aggregate Testing Standards (Quality Standards)
Concrete - C 1231 - Unbonded Caps

SOILS

Soils - E 329 - Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection
Soils - D 421 - Dry Preparation for Particle Size Distribution & Soil Constants
Soils - D 698 - Compaction Characteristics by Standard Effort
Soils - D 1140 - Material Finer than 75 μ m (No. 200) Sieve
Soils - D 1557 - Compaction Characteristics by Modified Effort
Soils - D 2216 - Water Content
Soils - D 2487 - Classification of Soils
Soils - D 2974 - Moisture, Ash, & Organic Matter of Peat & Other Organic Soils
Soils - D 3740 - Soil and Rock Testing Standards (Quality Standard)
Soils - D 4318 - Liquid & Plastic Limits & Plasticity Index
Soils - D 6938 - Density and Water Content by Shallow Depth Nuclear Method
Soils - D 6951 - Dynamic Cone Penetrometer in Shallow Pavement Applications