



AVILES ENGINEERING CORPORATION
5790 Windfern Rd
Houston, TX 77041
Ronald E. Ortwerth, P.E. Phone: 713 895 7645

GEOTECHNICAL

Valid To: November 30, 2025

Certificate Number: 0035.02

In recognition of the successful completion of the A2LA evaluation process (including an assessment of the laboratory's compliance with the A2LA R209 – Specific Requirements for Harris County/Houston, TX: Geotechnical Engineering Testing Laboratory Accreditation Program), accreditation is granted to this laboratory to perform the following tests under the ASTM recommended practice D3740:

Test Method:	<u>Test Description:</u>
Soils:	
ASTM D558	Moisture-Density (Unit Weight) Relations of Soil-Cement Mixtures
ASTM D698	Laboratory Compaction Characteristics of Soil Using Standard Effort
ASTM D854	Specific Gravity of Soil Solids by Water Pycnometer
ASTM D1140	Amount of Material in Soils Finer than No. 200 (75- μ m) Sieve
ASTM D1557	Laboratory Compaction Characteristics of Soil Using Modified Effort
ASTM D1883	CBR (California Bearing Ratio) of Laboratory-Compacted Soils
ASTM D2166	Unconfined Compressive Strength of Cohesive Soil
ASTM D2216	Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass
ASTM D2435/D2435M	One-Dimensional Consolidation Properties of Soils Using Incremental Loading
ASTM D2487	Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D2850	Unconsolidated-Undrained Triaxial Compression Test on Cohesive Soils
ASTM D2974, Excluding Method D	Moisture, Ash, and Organic Matter of Peat and Other Organic Soils
ASTM D4221	Dispersive Characteristics of Clay Soil by Double Hydrometer
ASTM D4253	Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D4254	Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density
ASTM D4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4546	One-Dimensional Swell or Collapse of Cohesive Soils
ASTM D4643	Determination of Water (Moisture) Content of Soil by Microwave Oven Heating
ASTM D4647	Identification and Classification of Dispersive Clay Soils by the Pinhole Test
ASTM D4718	Unit Weight and Water Content for Soils Containing Oversize Particles
ASTM D4767 ¹	Consolidated Undrained Triaxial Compression Test for Cohesive Soils

<u>Test Method:</u>	<u>Test Description:</u>
ASTM D4943	Shrinkage Factors of Soils by the Wax Method
ASTM D4959	Determination of Water (Moisture) Content of Soil by Direct Heating
ASTM D4972	pH of Soils
ASTM D5084	Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter
ASTM D5298	Measurement of Soil Potential (Suction) Using Filter Paper
ASTM D6276 (2006)	Using pH to Estimate the Soil-Lime Proportion Requirement for Soil Stabilization
ASTM D6913	Particle-Size Distribution (Gradation) of Soils Using Sieve Analysis
ASTM D6951/D6915M ²	Standard Test Method for Use of the Dynamic Cone Penetrometer in Shallow Pavement Applications
ASTM D7928	Particle-Size Distribution (Gradation) of Fine-Grained Soils Using the Sedimentation (Hydrometer) Analysis
Tex-145-E	Determining Sulfate Content in Soils - Colorimetric Method

¹ BSI 1377-7:1990 is used for multistage triaxial tests in conjunction with ASTM D4767

² This laboratory performs field testing activities for these tests



Accredited Laboratory

A2LA has accredited

AVILES ENGINEERING CORP.

Houston, TX

for technical competence in the field of

Geotechnical Testing

This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017 General requirements for the competence of testing and calibration laboratories. This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (refer to joint ISO-ILAC-IAF Communiqué dated April 2017).

Presented this 10th day of November 2023.



A blue ink signature of Mr. Trace McInturff, written over a horizontal line.

Mr. Trace McInturff, Vice President, Accreditation Services
For the Accreditation Council
Certificate Number 0035.02
Valid to November 30, 2025

For the tests to which this accreditation applies, please refer to the laboratory's Geotechnical Scope of Accreditation.