



Western Geotechnical & Laboratory Services (WGLS) was established in 2019 to address the demand for laboratory and field materials testing services in metropolitan and regional parts of WA.

The base laboratory is located at 235 Bank Street, Welshpool Perth, Western Australia from which all annex and branch laboratory operations are controlled.

EXPERTS IN

SOIL TESTING AGGREGATE TESTING REMOTE SERVICES CONCRETE TESTING CHEMICAL TESTING

We are committed to delivering specialised testing results to improve project outcomes with confidence.

Efficient and quality service, guaranteed.



SOIL TESTING

AS 1289, STATE ROAD AUTHORITY METHODS

Western Geotechnical & Laboratory Services are simply the best construction material testing laboratory in Western Australia. No one can compete with our unwavering delivery of excellence, backed up with our continual and consistent on-time delivery of results.

Our Laboratory construction materials testing scope of general classification, strength and compaction testing in accordance to AS 1289, MRWA, ASTM and many more standards includes but isn't limited to:

- Laboratory Permeability Testing Falling Head, Constant Head and Flexible Wall Permeability
- Dispersion Testing Emerson, Pinhole, Percent Dispersion
- Playing Field Assessment USGA
 Particle Size, Porosity, Hydraulic
 Conductivity, Water Holding Capacity
 and Moisture Release Curve.

- Compaction and CBR Testing (Laboratory holds over 100 mould's for efficient completion of large projects)
- Classification Testing including Particle
 Size Analysis, Hydrometer, Shrink Swell
 Index and Atterberg Limits
- Organic Testing both Chemical and Loss On Ignition
- Thermal and Electrical Conductivity / Resistivity





AGGREGATE TESTING

AS 1141, ASTM AND ROAD AUTHORITY METHODS

The foundation of WGLS was built around soil and aggregate testing. Our testing meets Australian Standard Specifications as well as State Road Authority Specifications.

Aggregate materials form the basis of a range of products. Our assessments of these aggregates can greatly influence the end quality of these products.

Our in-house NATA Accredited services include:

- Bulk Density / Particle Density Water Absorption
- Particle Size Analysis / Particle Shape
- Sodium Sulphate Soundness / Accelerated Soundness
- Los Angeles Abrasion
- Aggregate Crushing Value / Wet Dry Strength Variation
- Clay Fine Silt / Organic / Weak Particles

In conjunction with ARC Laboratory Services:

- Light Particles / Visual Comparison / Sugar / Methylene Blue
- Aggregate Resistance to Stripping
- Wear by Attrition
- Polished Aggregate Friction Value
- Accelerated Mortar Bar Alkali Silica Reactivity
- Degradation Factor
- Aggregate Chloride and Sulphate



REMOTE SERVICES

Western Geotechnical & Laboratory
Services are the premier remote
service providers in Western
Australia. We cater to the
vast demands of our clients'
expectations is some of the most
remote and challenging locations.

Our NATA accredited laboratories offer field testing, on and off-site laboratory testing for compaction control, classification, and other specialised testing of soil and aggregate materials, as well as concrete testing.

We have demonstrated success with mining based TSF upgrades, bulk earthworks, construction of tailings dams, mining haul roads, private and regional airports, road construction and upgrades, wind, salt and solar farms.

We have a large pool of resources, and our staff are trained to the highest level before being permitted to work in FIFO/DIDO environments. We can confidently meet any requirement and service outlook.







CONCRETE TESTING

AS 1012, ASTM, BS-EN AND ROAD AUTHORITY METHODS

Using high-end test equipment alongside custom-built curing and testing rooms, Pilbara Geotechnical & Laboratory Services can deliver test reports with expert accuracy. The testing covers a range of products including concrete, mortar, grout, and mix designs.



Our services include:

- Sampling and slumping of fresh concrete.
- Curing, Compression and Density
- Concrete Mix Designs
- Low Strength Backfill
- Mortar / Grout

In conjunction with ARC Laboratory Services:

- Modulus
- Round Panel
- Flexural Compression
- Admixures
- Shotcrete Mix Design
- Investigation Testing including,
- Petrography
- Chloride Permeability
- pH
- Carbonation
- UPV
- Absorption
- Drying Shrinkage



FIELD TESTING

AS 1289, STATE ROAD AUTHORITY METHODS

Western Geotechnical & Laboratory Services are the most efficient field testers in the state, our top of the range field vehicles and commitment to the best tools for the job allow us to come to site work safely, efficiently and with high quality. We pride our service on helping our clients achieve conformance through experience, training / education, and direct feedback.

Our services include but are not limited to:

- Australian Standard Nuclear Density Testing
- Main Roads WA Nuclear Density Testing
- Aggregate and Soil Stockpile Sampling
- Plate Load Bearing Testing

- Fresh Concrete Sampling, Slumping and Casting
- DCP / PSP Penetrometer Testing
- Thermal and Electrical Resistivity Testing
- Pavement Test Pitting and Layer Thickness







Contact Us

For more information and for all your testing needs contact our team no matter how big or small your requirements. Please contact Western Geotechnical & Laboratory Services.

Phone: 08 9472 3465 | Email: matt@wgls.com.au

Address: 235 Bank Street, Welshpool WA 6106

Respecting the custodians of the land

Respecting the custodians of the land Western Geotechnical & Laboratory Services acknowledges the Traditional Custodians of the land that is proposed to be worked on, and we pay our respects to their Elders past and present. We extend that respect to Aboriginal and Torres Strait Islander peoples on the Land, and throughout this great nation.

wgls.com.au