

Soil and Rock Mechanics Lab Testing

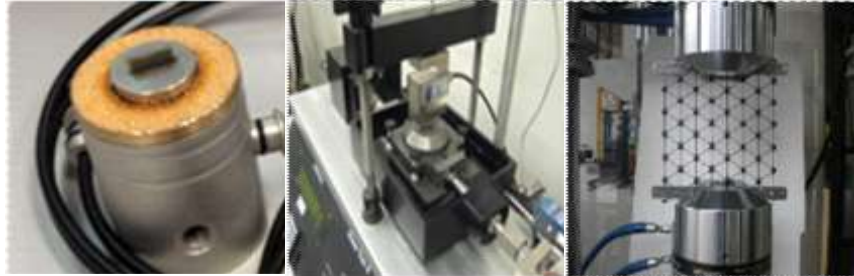
ABOUT US

Mining One is an exciting team of highly experienced and professional mining, geotechnical geological and hydrogeological consultants offering excellence in service and commitment to their clients with high level strategic, hands on practical design and implementation.

Our well respected team has extensive industry knowledge and experience in a diverse range of disciplines.

With our engineering knowledge and skills using a variety of software packages we are able to provide safe, cost-effective and problem solving solutions which reduce mine operating costs, increase productivity and maximise economic extraction.

For more information on any of our services please visit at:
www.miningone.com.au



Servicing

- Civil and Earthwork Contractors
- Consultants
- Mining Contractors

Projects

- Road works, rail, land subdivision, dams, landfills
- Tailings dams, mine closures

Engineering Analysis & Result Interpretation

- Ask for our "Test Interpretation Guides"

Advanced Geotechnical Testing

- For your added convenience, we provide advanced geotechnical tests through our associated laboratory in Swinburne University. These tests are not NATA accredited, however we ensure that you receive accurate and timely results. We handle the samples and reporting just the same as your samples with our laboratory.

Standard Tests	Test Methods
Aggregate tests	
Sampling of aggregates	AS1141 3.1
Particle Size Distribution	AS1141 11.1
Material finer than 75µm	AS1141 12
Soil Tests	
Disturbed Sampling	AS1289 1.2.1
Undisturbed Sampling	AS1289 1.3.1
Moisture Content	AS1289 2.1.1
Atterberg Limits	AS1289 3.1.1; 3.2.1 & 3.3.1
Linear Shrinkage	AS1289 3.4.1
Sieve Analysis	AS1289 3.6.1
Emerson Class	AS1289 3.8.1
Standard Compaction	AS1289 5.1.1
Modified Compaction	AS1289 5.2.1
CBR test	AS1289 6.1.1 & 6.1.2
Shrink Swell Index	AS1289 7.1.1
Rock Mechanics Tests	
Point Load Test	ASTM D5731 8

Typical Test Performed	Test Methods
ADVANCED GEOTECHNICAL TESTING	
Triaxial UU, CU	AS1289.6.4.1, 6.4.2
Hydraulic Conductivity	AS1289.6.7.1 to 6.7.3
Swell Pressure of Soil/Clay	ASTM D 4421; BS 1377-5
Flakiness Index	AS1141-15;
Los Angeles Abrasion	AS1141
Aggregate Crushing Value	AS1141.21
Loss on Ignition & Organic Content	AS1289.4.4.1
Cyclic Triaxial Soil, Aggregate and Mine Tailings	ASTM D 5311
Unconfined Compressive Strength Soil, Aggregate and Rocks;	AS5101.4; ASTM D 2166; 5102; 4219; 7012;
One Dimensional Consolidation, Primary and Secondary	AS 1289.6.6.1;
Hydraulic Rowe Cell Consolidation One Way, Two Way, Vertical and Horizontal Drainage Methods	ASTM D 4186; BS 1377-6
Repeated Load Triaxial Test Resilient Modulus and Permanent Deformation	AUSTROADS AG:PT/T053 AASHTO:T307 9.9;
Indirect Tensile Test and Resilient Modulus;	AS 2891.13.1; 1012.10 AS/NZ 2891.13.1;
Shear Wave Velocity Laboratory Vane Shear Test	ASTM D 4648; BS 1337-7
Soil Suction Total and Matric Suction Measurement	AS1289.2.2.1
Determination of Soil Water Characteristic Curve	ASTM D 5298; 6836
Direct Shear Test and Residual Shear Strength (Small & Large)	AS1289.6.2.2; ASTM D 3080
GEOTEXTILE/GEOSYNTHETICS TESTING	
Geosynthetics Burst Strength	AS 3706.4; ASTM D 3786
Geotextile Tensile Strength	AS 3706.2; ASTM D 6637
Internal & Interface Shear Resistance Coeff of Soils & Geosynthetic	ASTM D 6243; 5321

If a test you require is not listed or if you require a unique testing procedure, give us a call to discuss.