



Brisbane
346A Bilsen Road,
Geebung
QLD 4034
Ph: +61 7 3265 5656

Perth
2 Kimmer Place,
Queens Park
WA 6107
Ph: +61 8 9258 8323

Press Release: 24 October 2016

Rock Triaxial Technical Paper:

Trilab, as part of its ongoing research and development assistance, has participated in a technical paper written by Julian Venter with the assistance of Colin Purvis. Trilab is also participating in ARCARP Project C25025 "Guidelines for Estimating Rock Mass Strength from Laboratory Properties".

Synopsis: "A Probabilistic Approach to Estimating the Hoek Brown Intact Rock Parameters for Design"

The current practice in assessing the Hoek Brown intact rock parameters for rock mass failure mechanism stability assessment dictates the use of either single stage not multi stage Hoek Cell rock triaxial testing. Both of these methods require large numbers of data points to account for variability and result in best estimates for the Hoek Brown intact rock parameters based on regression of the data points. This paper presents a method of estimating a complete Hoek Brown intact failure curve based on a single sample with sufficient precision to be used as an estimate of intact rock strength for a single point location as it may not be possible to retrieve enough uniform rock core for multiple single stage tests. There are savings for both the testing as well as the transportation costs with multi stage testing.

The paper has already been presented at:

- ▶ **August 2016:** National University of Singapore, jointly organised by the Geotechnical Society of Singapore (GEOSS) and the Centre for Soft Ground Engineering. Trilab joint venture presentation with Julian Venter was very well received by all attendees. Our companies would like to thank Dr.Chian Siau Chen the Vice President of GEOSS and his society for their assistance. The seminar was attended by 80-100 of Asia's leading engineering professionals, provided Trilab an opportunity to present the latest in its geotechnical testing capabilities.
- ▶ **September 2016:** Asia Pacific Slope Stability in Mining (APSSIM) Conference was held in Brisbane, Australia, 6-8 September 2016. This inaugural conference provided a special forum for best practice and state-of-the-art targeted in respect to pit slope investigations, design, implementation and performance monitoring.

The testing for the paper was carried out by the latest in rock mechanics testing equipment the GCTS High Pressure Triaxial RTR-2500 system, in Trilab's Brisbane laboratory.

For further information please visit www.trilab.com.au or contact Colin Purvis, General Manager (col.purvis@trilab.com.au).

About Trilab

Trilab is Australasia's leading independent company providing specialised soil and rock mechanics testing, and calibration and instrumentation services to the Asia-Pacific mining and infrastructure industries.

The company holds Corporate Accreditation with the National Association of Testing Authorities, Australia (NATA) – Accredited Laboratory No. 9926 – which ensures the delivery of accurate and quality results.

If you no longer wish to receive these Trilab company updates, please reply to this email and type UNSUBSCRIBE in the Subject line.