

Accepted Manuscript

Assessment of brittleness and empirical correlations between physical and mechanical parameters of the Asmari limestone in Khersan 2 dam site, in southwest of Iran



Gholam Reza Lashkaripour, Ahmad Rastegarnia, Mohammad Ghafoori

PII: S1464-343X(17)30419-3
DOI: 10.1016/j.jafrearsci.2017.11.003
Reference: AES 3044
To appear in: *Journal of African Earth Sciences*
Received Date: 07 June 2017
Revised Date: 07 November 2017
Accepted Date: 08 November 2017

Please cite this article as: Gholam Reza Lashkaripour, Ahmad Rastegarnia, Mohammad Ghafoori, Assessment of brittleness and empirical correlations between physical and mechanical parameters of the Asmari limestone in Khersan 2 dam site, in southwest of Iran, *Journal of African Earth Sciences* (2017), doi: 10.1016/j.jafrearsci.2017.11.003

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

- Brittleness and geomechanical parameters of the Asmari formation from the Khersan 2 dam site were investigated.
- There was appropriate linear and nonlinear relationships between static and dynamic parameters in dry and saturated conditions.
- The correlation of the static and dynamic parameters with porosity was greater in dry conditions than saturated conditions.
- Multiple linear analyses indicated that brittleness index had a significant correlation ($R^2 = 0.90$) with UCS, V_p and the tensile strength.
- Estimation of brittleness index based on V_p had higher accuracy than that based on tensile strength and UCS.
- The correlation of brittleness index with B1, B2 and B3 concepts reveals that the best correlation of brittleness index was related to the B3 concept.
- Also, the correlation of the brittleness index with V_p , B1, B2 and B3 parameters was greater in dry conditions than saturated conditions.

Download English Version:

<https://daneshyari.com/en/article/8913655>

Download Persian Version:

<https://daneshyari.com/article/8913655>

[Daneshyari.com](https://daneshyari.com)