

## Erratum to: Experimental investigation of hydraulic fracture propagation in fractured blocks

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Published online: 22 April 2015  
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### Erratum to: Bull Eng Geol Environ DOI 10.1007/s10064-014-0665-x

The original article has been published inadvertently with some errors. The corrections are given below.

The fourth paragraph in the Introduction should be changed as follows:

A number of experimental studies has been conducted on the interaction between hydraulic fractures and natural fractures (Lamont and Jessen 1963; Daneshy 1974; Blanton 1986; Warpinski and Teufel 1987; Renshaw and Pollard 1995; Beugelsdijk et al. 2000; Athavale and Miskimins 2008; Zhou et al. 2008, 2010; Olson et al. 2012; Suarez-Rivera et al. 2013).

The sub section “Laboratory equipment” should be changed as follows:

Experimental set up and test procedure  
Laboratory equipment

The laboratory tests on the synthetic rock specimens were conducted in two different standard laboratories with

identical experimental set-ups in order to study the behavior of propagating hydraulic fracture in naturally fractured reservoirs. The experimental set-ups used in the tests included true tri-axial assembly, hydraulic voltage stabilizer, isolating assembly of hydraulic fluid and hydraulic power oil, servo supercharger, air compressor, hydraulic pump, controller and HP computer (Fig. 1). Cubic model blocks of dimension 300 mm on each side were positioned between the pressurized pistons to simulate in situ stress conditions (the vertical, maximum and minimum horizontal principal stresses). The pressure platens were equipped with four-square sheets to ensure equal pressure distribution. The maximum pressure was up to 28 MPa. A thin Teflon sheet, covered on both sides with Vaseline, was inserted between the model block and the pressure platen to prevent build-up of shear stress. The hydraulic fluid injection pressure was controlled by a servo hydraulic pump of MST 816 with the maximum capacity of fluid injection pressure of 140 MPa.

The caption of Fig. 1 should be changed as follows:

Fig. 1 Schematic of the tri-axial hydraulic fracturing test system used in the tests in this paper (after Zhou et al. 2008, 2010)

The following reference dated 2010 should be substituted for the same reference dated 2011:

Zhou J, Jin Y, Chen M (2010) Experimental investigation of hydraulic fracturing in random naturally fractured blocks. *Int J Rock Mech Min Sci* 47:1193–1199.

The affiliations of two of the authors should be changed as follows:

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The online version of the original article can be found under doi:[10.1007/s10064-014-0665-x](https://doi.org/10.1007/s10064-014-0665-x).

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The Acknowledgements should be changed as follows:

**Acknowledgments** This work is financially supported by the National Natural Science Foundation of China (Grant No. 51174217). We also

acknowledge the help of Prof. Mian Chen, Dr. Hou Being, Dr. Jian Zhou and Dr. Jennifer L. Miskimins (Colorado School of Mines, USA) for their consistent support, patience and guidance throughout our studies.