Simultaneous analysis of ¹⁷O/¹⁶O, ¹⁸O/¹⁶O and ²H/¹H of gypsum hydration water by cavity ringdown laser spectroscopy

Fernando Gázquez^{1*}, Ian Mather¹, James Rolfe¹, Nicholas P. Evans¹, Daniel Herwartz²,

Michael Staubwasser² and David A. Hodell¹

¹Godwin Laboratory for Palaeoclimate Research. Department of Earth Sciences. University of Cambridge. Downing Street, Cambridge, Cambridgeshire, CB2 3EQ, United Kingdom

²Institute für Geology und Mineralogy. Universität zu Köln. Greinstrasse. 4-6, 50939, Köln, Germany

*corresponding author (f.gazquez@ual.es)

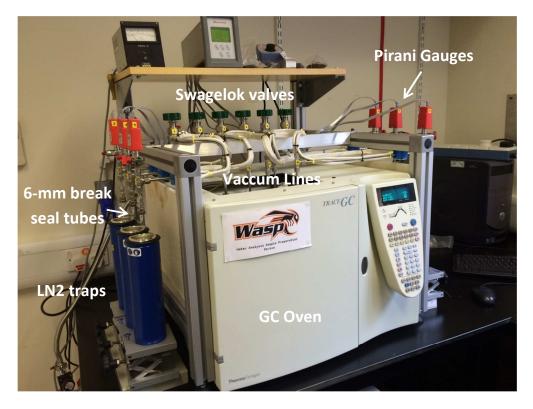


Figure S1. Frontal view of the Water Analyzer Sample Preparation (WASP) apparatus.



Figure S2. Bird's-eye view of the WASP apparatus.



Figure S3. 6-mm break-seal tubes and LN2 traps.



Figure S4. Internal view of the GC oven. Note the 6 disposable 12-mm Pyrex tubes for gypsum sample loading.

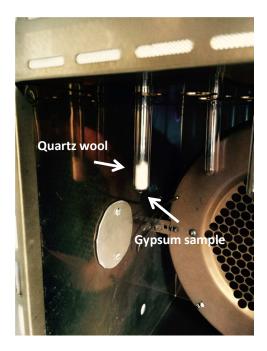


Figure S5. 12-mm Pyrex tubes loaded with a gypsum sample and topped with 3 cm of quartz wool before hydration water extraction.

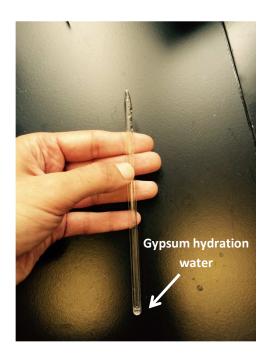


Figure S6. Gypsum hydration water recovered after a WASP run in a 6-mm break-seal tube.