

| Laboratory number | Water ^a (%) | Radionuclide concentrations ^b | | | α radiation ^c (Gy/kiloyears) | β radiation ^d (Gy/kiloyears) | γ radiation ^e (Gy/kiloyears) | Total dose rate (Gy/kiloyears) | Equivalent dose ^f (Gy) | Optical age (years) |
|-------------------|------------------------|------------------------------------------|-----------|-----------|------------------------------------------------|-----------------------------------------------|------------------------------------------------|--------------------------------|-----------------------------------|---------------------|
| | | K (%) | Th (ppm) | U (ppm) | | | | | | |
| DB01 | 50 ± 20 | 0.07 ± 0.01 | 6.7 ± 0.3 | 2.1 ± 0.1 | 0.03 ± 0.01 | 0.30 ± 0.03 | 0.04 ± 0.01 | 0.36 ± 0.04 | 0.09 ± 0.01 | 260 ± 40 |

^a estimated time-averaged moisture contents

^b obtained by INAA (Becquerel Laboratories, Mississauga)

^c assumed internal alpha dose rate

^d derived from INAA radionuclide concentration measurements using the conversion factors of Adameic and Aitken (1998), corrected for attenuation by water and beta attenuation

^e derived from INAA radionuclide concentration measurements using the conversion factors of Adameic and Aitken (1998), corrected for attenuation by water

^f central age model (Galbraith *et al.* 1999), including a ± 2 % systematic uncertainty associated with calibration of the laboratory beta-source.