Supplement



Fig. S1. Mineral separation of molybdenite from the Trojárová deposit was performed in Bratislava, and separates were shipped to AIRIE by DHL. Sample PT-45/271a (*MD-1997*) — coarse-grained molybdenite arrived to AIRIE in good condition completely intact in its centrifuge vial (Vial-1), whereas Vial-2 and Vial-3 representing sample PT-45/271b (*MD-2009*), were cracked during the shipping process, allowing some of the sample to spill into the protective baggie holding the vials. Thus, the analysed molybdenite was collected together from the cracked vials and from inside the protective baggies to recreate the full mineral separate. Although not ideal, we do not feel that the Re–Os age was compromised, as the molybdenite separate in Vial-1 was completely contained. Pen tip for scale. However, mineral separation of molybdenite from the Dúbrava deposit was performed in the AIRIE laboratory and meets its standard protocol.



Fig. S2. This vial was not open/broken.