carbonatisation. Some granites are highly deformed (Mailberg, Wulzeshofen) probably caused by the Mailberg fault. West and south of this area metapelites to metagreywackes prevail. The rocks consist of quartz, white mica, chlorite, plagioclase, kalifeldspar, biotite, staurolite, garnet, and rarely kyanite. The abundance of ore minerals is high. In some drillholes metatuffs with quartz, biotite, amphibole, plagioclase, clinozoisite, and minor muscovite were found.

The metamorphism of the sequence ranges from the upper greenschists to amphibolite facies as evidenced by the occurrence of biotite, staurolite, and garnet. This older metamorphism is overprinted by a low grade greenschists facies event. The metapelites and metagreywackes might be considered as a metasedimentary sequence closely associated with the Brno Pluton, thus being a part of the Brunovistulicum. There is a striking lithological similarity of these metasediments with those of the Therasburg formation in the Moravian zone. This argues for a close primary connection at least of the deeper part of the Moravian zone with the Brunovistulicum.

GEOCHEMICAL AND ISOTOPICAL INVESTIGATIONS OF GNEISSES IN THE CENTRAL TAUERN WINDOW (AUSTRIA)

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Several gneisses from the Felbertal tungsten deposit and its vicinity have been analysed. Most of these gneisses are reliably dated by U-Pb in zircons.
Scheelite-rich quartzitic rocks with Lower Paleozoic/Precambrian (545 Ma) ages, muscovite-microcline gneisses (K1 and K3 with ages around 334 Ma), undated K2-gneisses as well as Granatspitz-Central gneisses (280 - 325 Ma) were investigated in the εNd-εSr-evolution diagram combined with their REE and LIL-elements pattern. The first three rock types represent characteristic host rocks within the scheelite deposit.

REE-patterns of the K1- and K3-gneisses (in total 21 analyses) fit patterns from monzogranites and syenogranites with small to moderate, negative Eu-anomalies (total amount of REE between 44 and 300 ppm). The samples taken from K2 show less or no Eu-anomaly. Patterns of the scheelite-rich quartzitic rocks are characterized by low REE-contents and by HREE-depletion. The LIL-elements patterns of these three rock types show differences analogous to the REE-patterns.

In the ε^t_{CHUR}Nd-ε^t_{UR}Sr-evolution diagram (assumed age for correction: $t = 300$ Ma) the geochemical differences between K1/K3, K2 and the Central gneisses are supported by isotopical data. The samples, except from the K2-ore body, show negative ε^tNd values (-2 to -8). The data arrays diverge into two individual branches towards two end-member compositions. These arrays can be interpreted by two theoretical mixing hyperbolas indicating chondritic mantle-young crust and chondritic mantle-old crust mixing, respectively. The K2-samples corrected for 300 Ma do not allow a well-established mixing interpretation. Supposedly these gneisses are older than 300 Ma or highly disturbed in their Rb-Sr system.

The Felbertal deposit gneisses cannot be derived from a single magma reservoir. Magma mixing with at least two different crustal sources must be postulated. We want to draw attention to the data from the Granatspitz-Central gneisses with ε^tNd ≈ -5 to -9 and ε^tSr ≈ +150. These data are far outside the range of Central gneiss data in the literature (ε^tNd ≈ -1 to -5 and ε^tSr ≈ +10 to +50) and support the geochemical interpretation of the Granatspitz-Central gneiss protolith as a S-type granite. Furthermore they do not favour a genetical link to the gneisses within the ore deposit Felbertal.

GEODYNAMIC EVOLUTION OF THE SOUTHEASTERN BOHEMIAN MASSIF: FROM A CADOMIAN ARC OVER AN EARLY PALEOZOIC RIFTING EVENT TO A VISEAN SUBDUCTION-COLLISION SCENARIO - A TYPICAL VARISCAN STORY

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Many rocks of the southeastern Bohemian Massif, particularly in the Brunovistulian (DUDEK, 1980), but also in the Moldanubian unit, are remnants of a Cadomian magmatic arc. The nature and geometry of this arc system may be tentatively inferred on the basis of geochemical data (FINGER et al. 1989, 1994; JELINEK & DUDEK, 1993; FINGER & STEYRER, 1994): Parts of the arc are probably resting on Proterozoic Gondwana basement. On the other hand, there is also evidence for voluminous growth of juvenile Cadomian crust in an outer arc or island arc setting, and perhaps for the existence of a back arc basin, that closed through arc-continent collision.

This arc-type crust subsequently underwent extension in the Early Paleozoic, and was intruded by basalt melts issued from enriched subcontinental mantle (STEYRER & FINGER, 1992). A continental rift developed and enlarged to the size of a small ocean ("Raabs ocean" - FINGER & STEYRER, 1994), remnants of which are preserved in the realm of the Raabs-Meisling unit (THIELE, 1984). Parts of the sedimentary record of the Drosendorf unit (THIELE, 1984) were deposited along the passive margin of this ocean.

Probably in the Devonian, the Raabs ocean started to close again in being subducted below another Gondwana derived active plate margin terrane, that finally