



Fig. 20. Selected tectonic structures in the Leszna Górna quarry: A – a fold structure proving NNW shortening; B – hinge zone of the fold in picture A, with well-visible dextral shear zones (C) (hammer for a scale); D – conjugate set of normal faults formed as a result of fold axis-parallel extension.

### Stop 3 – Dolní Líštná near Třinec (Moravian part of the Czech Republic) – rare fossil polychelid lobsters in turbiditic palaeoenvironments (Lower Cretaceous, Valanginian) (Figs 8, 13)

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In the Dolní Líštná surroundings the Hradiště Formation is dominant, especially in its lower part, and was known earlier as the Upper Těšín (Cieszyn) Shales (= Oberen Teschener Schiefer of Uhlig 1902 or Oberen Těšín-Schichten of

Vašíček 1975; see also Menčík *et al.*, 1983) which belonged recently to the Cisownica Shale Member of the Hradiště Formation (Golonka *et al.*, 2008) (Fig. 8).

The extremely sporadic benthic macrofossils of the Silesian Basin are Polychelidan lobsters which were identified here in Hradiště Formation. They are one of the rare groups of decapod crustaceans which were first discovered as fossils long before being identified in extant deep-sea environments. As for other decapods, their fossil record is highly incomplete. Only three fossil Polychelidae have been identified to date. Species *Woodwardicheles neocomiensis* (Woodward, 1881) derived from the Valanginian (Early Cretaceous) of the Outer Carpathians (Dolní Líštná near Třinec, Moravian part of the Czech Republic). Analysis specimen is probably autochthonous or parautochthonous to turbiditic palaeoenvironments and corresponds to typical Polychelidae which inhabited deep water regime (Audo *et al.*, 2018).