

Basin provenance and its control on mineralisation within the early Devonian Cobar Basin, western Lachlan Fold Belt, eastern Australia

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Received 13 August 2023; accepted 7 November 2023

Editorial handling: Chris Fergusson

SUPPLEMENTAL DATA

Australian Journal of Earth Sciences (2024), 71(2), <https://doi.org/10.1080/08120099.2023.2290245>

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Supplemental data

Appendix 1

Figure A1. Cathodoluminescence photomicrographs of detrital zircon grains from the Amphitheatre Group samples.

Figure A2 Photomicrograph of the sedimentary samples from the Amphitheatre Group:

Appendix 2. Sample list, whole rock geochemistry and zircon U-Pb chronology. (Excel workbook).

Appendix 1.

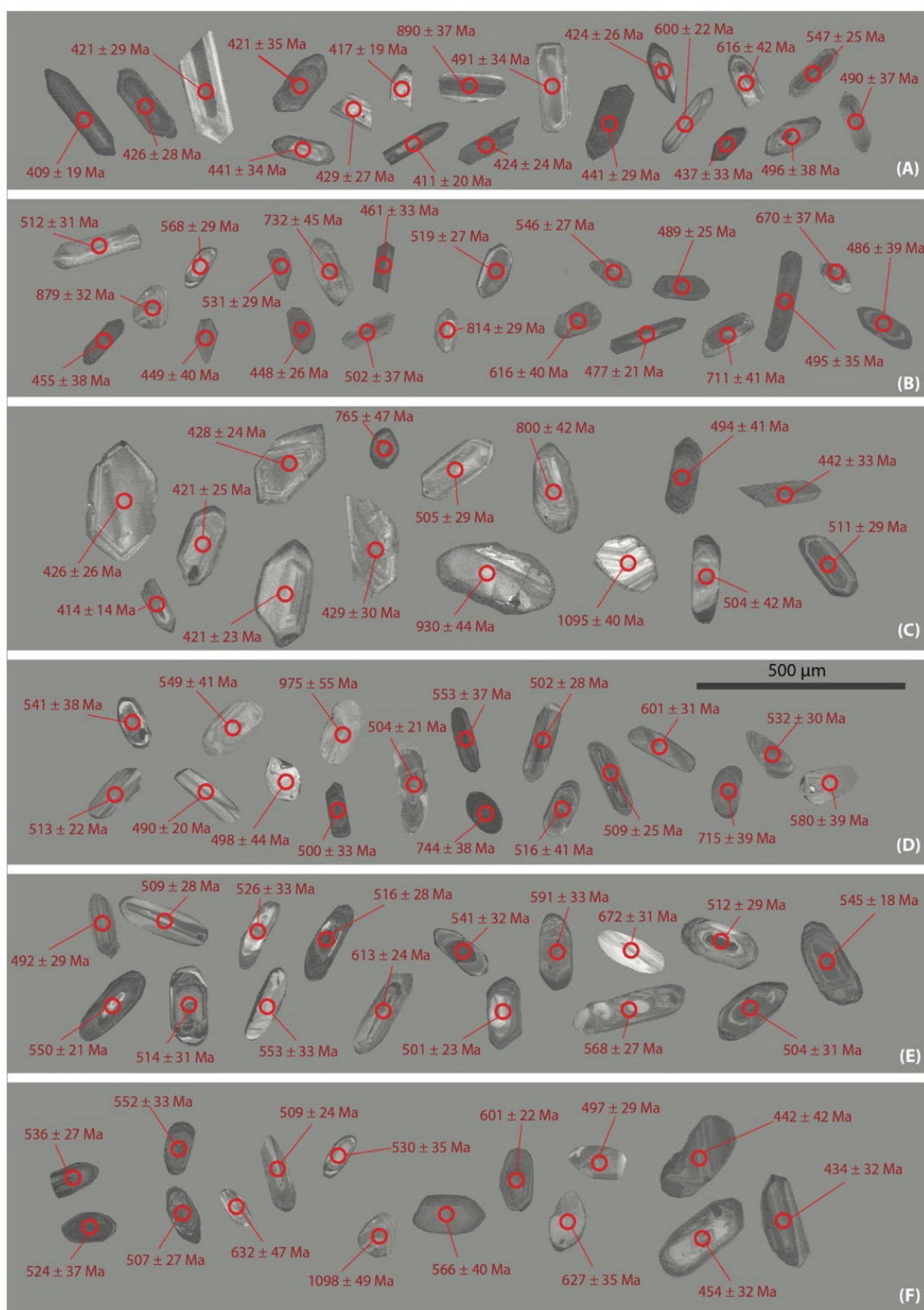


Figure A1. Cathodoluminescence photomicrographs of detrital zircon grains from the Amphitheatre Group samples: (A) lower Amphitheatre Group; (B) CSA Siltstone; (C) Shume Formation; (D) Biddabirra Formation; (E) Alley sandstone member; (F) upper Amphitheatre Group. Circles show analytical spots for U-Pb analyses.

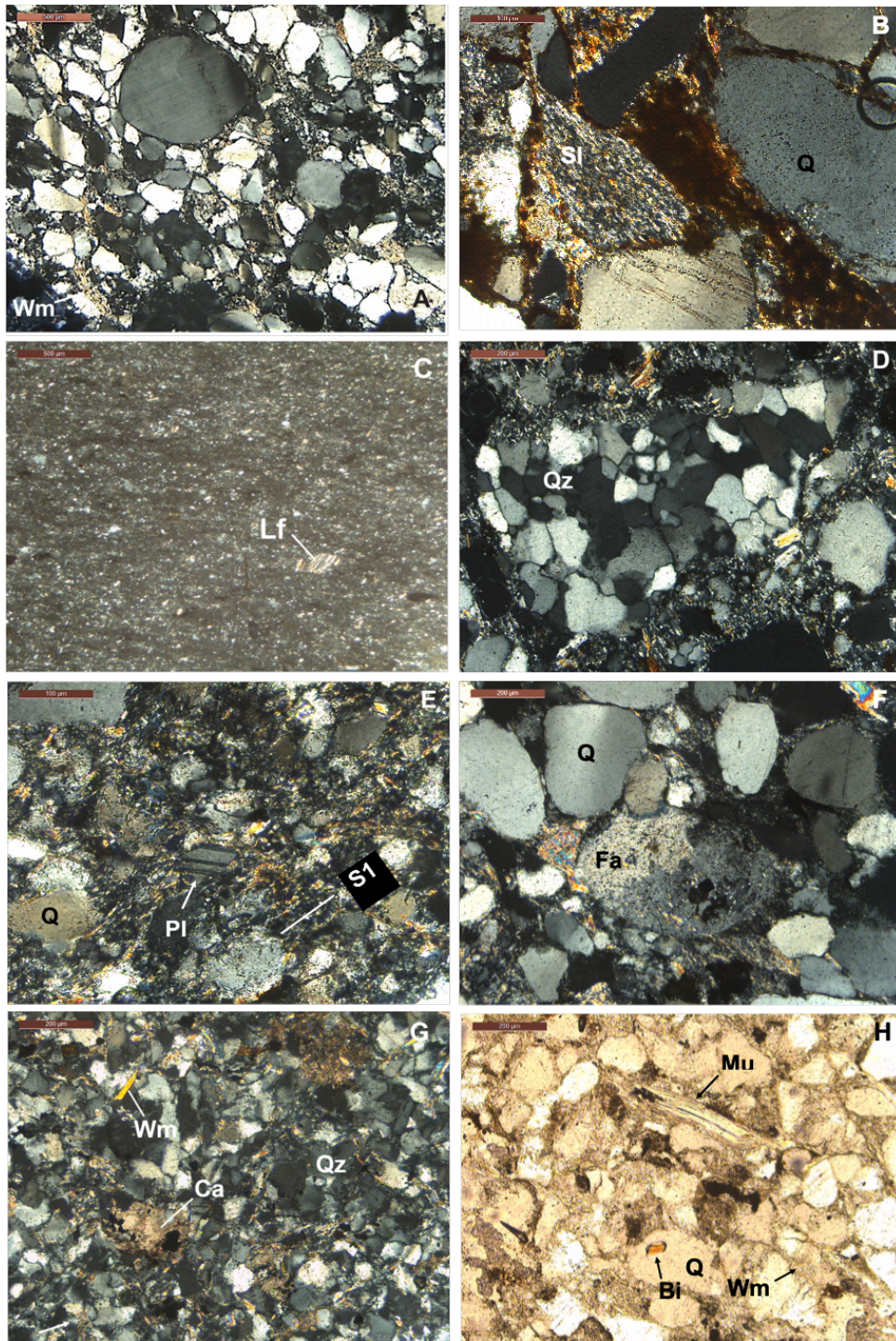


Figure A2 Photomicrographs of the sedimentary samples from the Amphitheatre Group: (A) Rounded quartz grain in a fine-grained groundmass of subangular quartz grains and very fine-grained white mica aggregates (Wm). Shume Formation (Sample LN-05). Scale bar: 500 μm . XP; (B) Slate clast (Sl) surrounded by subangular and subrounded quartz (Q) grains. Shume Formation (Sample 37S-2D-01). Scale bar: 100 μm . XP; (C) Lithic fragment (Lf) within fine grained matrix. Upper Amphitheatre Group (Sample DD87GA1). Scale bar: 500 μm . XP; (D) Quartzite clast (Qz) in sample MXSCSTJ0338 (upper Amphitheatre Group). XP; (E) Sample LN-06 (Shume Formation) showing plagioclase (Pl), quartz (Q) and fine-grained white mica (Wm) defining cleavage (S_1). Scale bar: 100 μm . XP; (F) Coarse feldspar aggregate (Fa) in rounded grain surrounded by subangular and subrounded grains of quartz (Q). Sample 375-2D-03 (Shume Formation). Scale bar: 200 μm . XP; (G) Sample NP1235 (CSA Siltstone) showing Carbonate fragment (Ca), quartz (Qz) and white mica (Wm). Scale bar: 200 μm . XP; (H) Sample LN02. Detrital muscovite (Mu) surrounded by subrounded grains of quartz (Q) associated with very fine-grained white mica (Wm). Note biotite (Bi) inside one quartz grain. Sample LN-02 (Shume Formation). Scale bar: 200 μm . PPL