REFERENCE Qa Alluvium - unconsolidated silt, sand and gravel $\label{lagrangian} \begin{tabular}{ll} Lacustrine deposits $-$ clay, silt; saline in part\\ Mixed lacustrine and eolian deposits $-$ clay, silt, sand\\ \end{tabular}$ QI QUATERNARY Qd Eolian sand — in sheets and dunes Ow Qe **PHANEROZOIC** CAINOZOIC Qb Eluvium - gilgai; swelling clay soils Alluvium and colluvium - red-brown sandy and clayey soil Qw ${\bf Colluvium-unconsolidated\ quartz\ and\ rock\ fragments\ in\ soil}$ ${\bf Colluvium\ and\ eluvium\ - \ clay\ hardpan}$ Czk Czb Czr Czp Czo Colluvium - partly consolidated valley-fill deposits Czc Czb Silcrete - siliceous duricrust Czl Czr ${\bf Laterite-massive\ and\ pisolitic\ ferruginous\ duricrust}$ Laterite, includes surficial hematite-goethite deposits on banded iron-formation; forms Hamersley Surface Czp **ROBE PISOLITE** — pisolitic limonite deposits developed along old river channels Calcrete — sheet carbonate usually formed in major drainage lines

Opaline silica — vuggy white opaline silica developed within calcrete and on partially consolidated valley-fill Quartz veins Dolerite and metadolerite dykes; numbers identify different swarms, lowest number oldest d_{3.8} Dolerite - in sills and small intrusions ILGARARI FORMATION: shale, some manganiferous; siltstone, claystone, fine-grained sandstone; minor chert Mz Subgroup CALYIE FORMATION: quartz arenite; flaggy to massive pebbly sandstone, minor conglomerate, siltstone and shale Mv BACKDOOR FORMATION: shale, siltstone, minor fine-grained sandstone, dolomite and chert Mb Silicified marker horizon c. 1100 Ma Mv(s) DEVIL CREEK FORMATION: laminated and massive dolomite, interbedded shale, dolomitic breccia, chert and siltstone Mv(s) Group Black chert, banded chert; may be a correlate of DISCOVERY CHERT Md JILLAWARRA FORMATION: shale, siltstone, minor sandstone, chert, claystone Subgroup KIANGI CREEK FORMATION: quartz arenite, pebbly sandstone, minor conglomerate, siltstone Mk Edmund **CHEYNE SPRINGS FORMATION:** dolomite, dololutite, dolomitic breccia Mb Mpd(d) Mpd(g) PRAIRIE DOWNS FORMATION: quartz arenite, quartz wacke, pebbly sandstone, interbedded conglomerate Mpd Boulder conglomerate interbedded coarse-grained sandstone Mpd(c) Mpd(d) Mpd(g) Medium-grained glauconitic sandstone, siltstone, shale IRREGULLY FORMATION: dolomite, dololutite, chert c. 1500 Ma Boulder conglomerate, conglomeratic sandstone, pebbly sandstone, interbedded fine sandstone and mudstone CAPRICORN FORMATION: fine- to medium-grained sandstone, siltstone and mudstone Unassigned; dolomite, usually stromatolitic ASHBURTON FORMATION: mudstone interbedded with sandstone and dolomite; intruded by dolerite sills Wa Group $c. 2000 \, \mathrm{Ma}$ ASHBURTON Wyloo MOUNT McGRATH FORMATION: coarse sandstone BEASLEY RIVER QUARTZITE: fine-to coarse-grained sandstone; may be silicified Undifferentiated; mudstone BOOLGEEDA IRON FORMATION: fine-grained, finely laminated, dark grey-brown to black, flaggy iron-formation; minor chert, jaspilite WOONGARRA VOLCANICS: quartz-or feldspar-phyric rhyolite and rhyodacite as sills or flows; tuff and minor jaspilitic banded iron-formation (2470 ± 30 Ma, U-Pb; 2370 Ma, Rb-Sr) WEELI WOLLI FORMATION: interlayered banded iron-formation and metadoleritic sills, minor shale Medium- to coarse-grained massive grey-green metadolerite sills, usually foliated Hid Hamersley **BROCKMAN IRON FORMATION:** banded iron-formation, chert and minor shale (2490 \pm 20 Ma, U-Pb) 2500 Ma MOUNT McRAE SHALE and MOUNT SYLVIA FORMATION: interbedded shale, chert and banded iron-formation WITTENOOM DOLOMITE: dolomite; interbedded thin chert, shale and dolomite in upper part MARRA MAMBA IRON FORMATION: chert, ferruginous chert and banded iron-formation with minor shale Metadolerite sills intruded into Fortescue Group; medium- to coarse-grained, massive grey-green rock, usually foliated Fd HAMERSLEY JEERINAH FORMATION: interbedded mudstone, siltstone and chert with minor felsic tuff, dolomite and sandstone Fjb Metabasalt; pillows locally well developed Upper mafic volcanic unit: metabasalt with minor metadolerite sills Fbu Group Pok Spinifex-textured komatiitic metabasalt, ultramafic schist Fus Serpentinite Felsic pyroclastic unit; felsic metatuff with minor banded chert Lower mafic volcanic unit; interbedded metabasalt and mafic metatuff Foo $c.\ 2750\ {
m Ma}$ Basal metasedimentary unit; phyllite, quartz-muscovite schist, metasandstone and metaconglomerate, minor carbonate Serpentinite forming southern ultramafic intrusion US₂ Chalcedonic and opaline silica developed on us₂ d1.2 Metadolerite and amphibolite dykes Granitoid rocks, undifferentiated, deeply weathered Medium, even-grained, metagranite to metagranodiorite Medium-grained, metagranite to metagranodiorite with sparse feldspar phenocrysts gv Mesocratic to melanocratic metamonzodiorite to metaquartz-diorite; coarse cumulate phase locally present
Mixed granitoid unit; extensive veins and patches of ge and gv intrude into a strongly foliated or banded metagranite to metagranodiorite gm > 2750 Ma Interbedded chert, fuchsitic metaquartzite, minor pelitic and semi-pelitic schist 🥒 ih / ic im 🌶 Chert and banded iron-formation, undifferentiated Grey and white banded chert Hematite-magnetite-guartz banded iron-formation im Magnetite-quartz banded iron-formation; recrystallized, higher grade equivalent of ih Amphibolite; fine-, medium- and coarse-grained varieties derived from extrusive and intrusive rocks bg Metagabbro; medium- to coarse-grained Serpentinite; cumulate textures may be preserved ua Tremolite-chlorite-talc schist