KURNALPI

AUSTRALIA 1:100 000 GEOLOGICAL SERIES — **GEOLOGICAL SURVEY OF WESTERN AUSTRALIA** — **SHEET 3336**

122°00' 10' 20' 122°30' — 30°30' 40' 50' 31°00'

PHANEROZOIC

CAINOZOIC

QUATERNARY

Qo — Alluvium — clay, silt, sand, and gravel; in stream channels and flood plains

Czs — Evaporite, interbedded with clay, silt, and sand in playas

Czd — Sand, silt, and gypsum in stabilized dunes adjacent to playas

Czc — Colluvium — gravel and sand as sheetwash and talus; includes laterite fragments

Czg — Quartzo-feldspathic sand over granitoid rock

Czs — Sandplain — yellow sand, with some pisolitic laterite pebbles

Czl — Laterite and reworked products

Czr — Residual, deep red, unconsolidated soil; overlies mafic and ultramafic Proterozoic dykes

Eby — Mafic and ultramafic dykes; interpreted from aeromagnetic data where dashed. Eblyc — Celebration Dyke, Eblyr — Rondolfo Dyke

Vq — Veins and dykes: q — quartz, g — granitoid, p — pegmatite

Ag — Granitoid, undivided

Agm — Monzogranite, common K-feldspar phenocrysts, with biotite and local hornblende

Agmc — **COMARINA MONZOGRANITE:** K-feldspar phenocrysts

Agmy — **YINDI MONZOGRANITE:** even-grained

Agmb — **BULYARDIE MONZOGRANITE:** perthitic K-feldspar megacrysts with hornblende

Agmp — Porphyritic biotite monzogranite to monzogranite porphyry

Apq — Felsic porphyry, sill or dyke; small quartz and/or feldspar phenocrysts

Apg — Granitoid porphyry, includes granodiorite porphyry; prominent plagioclase, quartz and/or biotite phenocrysts

Apl — Hornblende lamprophyre

App — Plagioclase-phyric biotite felsic porphyry; numerous euhedral plagioclase and few quartz phenocrysts; strongly foliated; narrow sills and dykes

As — Sedimentary rock, undivided

Ash — Grey slate, siltstone, and minor sandstone; commonly well cleaved, with biotite, and local garnet, andalusite, staurolite, and/or cordierite porphyroblasts

Asg — Greywacke, with minor interbedded siltstone; cross-bedded and graded; biotite bearing; widespread carbonate alteration

Asp — Polymictic conglomerate, with subordinate sandstone; floated pebbles and boulders of granitoid, felsic porphyry, gabbro, chert, and mafic schist

Ass — Sandstone, with minor conglomerate and siltstone

Asf — Quartzo-feldspathic to micaceous epiclastic slate, siltstone, and sandstone interlayered with feldspar-phyric schist of felsic volcanic and volcaniclastic derivation

Asi — Intermediate sedimentary and volcaniclastic rocks; well bonded and foliated; amphibolite-biotite-feldspar-quartz schist; locally garnetiferous; biotite(-garnet) slate and feldspar-phyric felsic schist

Asip — Conglomeratic intermediate sedimentary and volcaniclastic rocks; pebbles predominantly amphibole-feldspar-quartz-garnet rock and feldspar-phyric felsic schist

Ac — Chert, locally grey and white banded; includes silicified grey to black slate; finely layered and locally pyritic; interpreted where dashed (section only)

Aci — Banded iron-formation, oxide facies; quartz-magnetite(-biotite) rock; interpreted from aeromagnetic data where dashed

Acis — Banded iron-formation, silicate facies; includes biotite-grunerite(-hornblende) siliceous slate

At — Felsic (acid to intermediate) volcanic rock, undivided

Afv — Felsic volcanic and volcaniclastic rock; foliated; porphyritic with prominent feldspar and/or quartz phenocrysts or clasts; includes fragmental rocks and crystal lithic and finely layered tuffs

Aft — Felsic tuffaceous rock; finely banded; foliated; fine- to medium-grained quartz and feldspar phenocrysts

Afs — Quartzo-feldspathic micaceous schist derived from felsic volcanic, subvolcanic, and/or volcaniclastic rock

Aas — Quartz-andalusite rock with local chiastolite; quartz-mica rock within felsic volcanic sequence

Ask — Quartz-kyanite-andalusite rock with local chiastolite; local quartz clasts

Ath — Quartz-chiastolite-kyanite rock

Aiv — Intermediate volcanic rock; andesite to basalt with feldspar and hornblende phenocrysts, amygdaloidal; epidote and/or carbonate alteration common; includes feldspar-quartz-chlorite-hornblende schist

Aix — Intermediate volcanic rock, with fragmental and tuffaceous textures; epidote and carbonate alteration

Ao — Mafic intrusive rock, undivided

Aog — Gabbro, with minor pyroxenite and quartz gabbro

Aop — Feldspar-phyric dolerite and gabbro

Aox — Pyroxenite and pyroxenitic gabbro; with scattered euhedral feldspar phenocrysts

Ab — Basalt, undivided; includes feldspar-hornblende or chlorite schist; locally feldspar-phyric

Abd — Basalt and dolerite; massive, ophitic textured

Abv — Basalt with abundant varioles; pillowed

Abp — Basalt, feldspar-phyric

Abi — Basalt to basaltic andesite; amygdaloidal, feldspar-phyric; contains brecciated flow tops and fragmental / tuffaceous layers

Abm — High-Mg basalt with quenched pyroxene (amphibole) texture; includes ocellar-textured basalt

Abc — Basalt, extensively carbonated; includes massive carbonate lenses

Aba — Amphibolite, derived from basalt

Au — Ultramafic rock, undivided

Auk — Komatiite; olivine cumulate zones dominate spinifex-textured zones; includes tremolite-chlorite and talc-chlorite schist

Aukc — Komatiite, extensively carbonated; includes carbonate-talc-chlorite schist and massive carbonate lenses

Aup — Peridotite, serpentinized; locally with rodingite lenses

Aut — Talc-chlorite(-carbonate) schist; minor tremolite-chlorite schist

PROTEROZOIC

ARCHAEAN

Metamorphosed at greenschist and lower to mid-amphibolite facies

Geological boundary
- accurate
- interpreted
- interpreted, partly based on aeromagnetic data
- interpreted, partly based on aeromagnetic data, position doubtful

Fault, inferred

Shear zone, mostly concealed
- major, interpreted, position doubtful
- minor

Fold, showing direction of plunge
- syncline, inferred
- anticline, inferred
- minor fold, asymmetric
- minor fold, symmetric

Bedding, showing strike and dip
- inclined
- vertical
- overturned
- trend (section only)

Igneous layering
- inclined

Dominant metamorphic foliation
- inclined
- vertical

Strongly foliated rock

Cleavage, widely spaced
- inclined
- vertical

Way-up indicator
- Igneous layering or differentiation
- pillow lava
- sedimentary structure

Mineral lineation
- horizontal
- plunging

Intersection lineation
- horizontal
- plunging

Fracture or joint
- inclined
- vertical

Air photo lineation
- foliation trend in greenstone
- fracture patterns in granitoid rock

Mineral field boundary

Mineral field district boundary

Formed road

Track

Fence, generally with track

Railway, with siding — Curlin

Homestead — Avoca Downs

Locality — Boolbundie

Building

Horizontal control; major, minor

Breckaway

Sand dune

Contour line, 20 metre interval — 240

Watercourse, ephemeral

Bore — B

Well — W

Windpump

Dam — D

Tank — T

Position doubtful — PD

Mining centre — KURNALPI

Mine (gold unless otherwise indicated) — Moon

Opencut

Alluvial workings

Battery or treatment plant, abandoned

Mineral exploration drill hole showing subsurface data — Ab

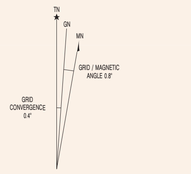
Interpreted subsurface lithology — Ag

Mineral occurrence
- Copper — Cu
- Nickel — Ni

NEARNGING 2937	DAYHURST 3037	BARDOC 3137	GINDALBIE 3237	MULGABBIE 3337	PAUN 3437
MOUNT WALTON 2936	SH 51-9 DUNDAS 2936	KALGOORLIE 3036	KAMONA 3136	KURNALPI 3236	ROE 3436
BOORABBIN 2935	WOOLGANGIE 3035	YILMIA 3135	LAKE LEFROY 3235	MOUNT BELCHES 3335	EMPANA 3435
LAKE PERCY 2934	SH 51-13 DIAMOND ROCK 3034	CAVE HILL 3134	COMARA 3234	SH 51-14 YARDINA 3334	YARDILLA 3434

KALGOORLIE — KURNALPI — BOORABBIN — WANGANOOLTHA

1:100 000 maps shown in black
1:250 000 maps shown in brown



True north, grid north and magnetic north are shown diagrammatically for the centre of the map. Magnetic north is correct for 1991 and moves easterly by about 0.1° in 3 years.

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DIRECTOR, GEOLOGICAL SURVEY OF WESTERN AUSTRALIA

SCALE 1:100 000

1000 0 1 2 3 4 5 6 7 8 9 10
Metres — Kilometres

TRANSVERSE MERCATOR PROJECTION
Grid lines indicate 1000 metre interval of the Australian Map Grid Zone 51

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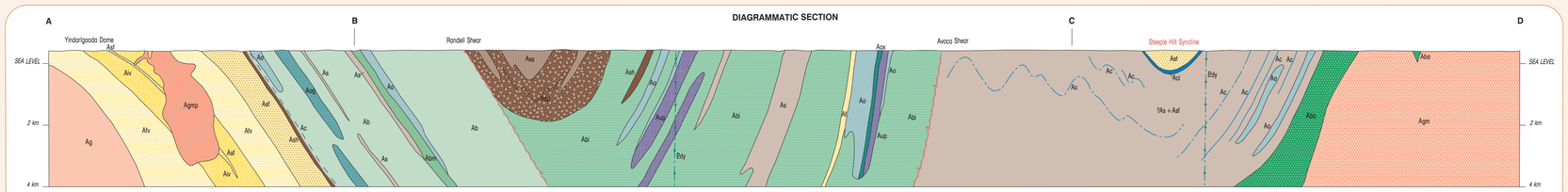
DIAGRAMMATIC SECTION