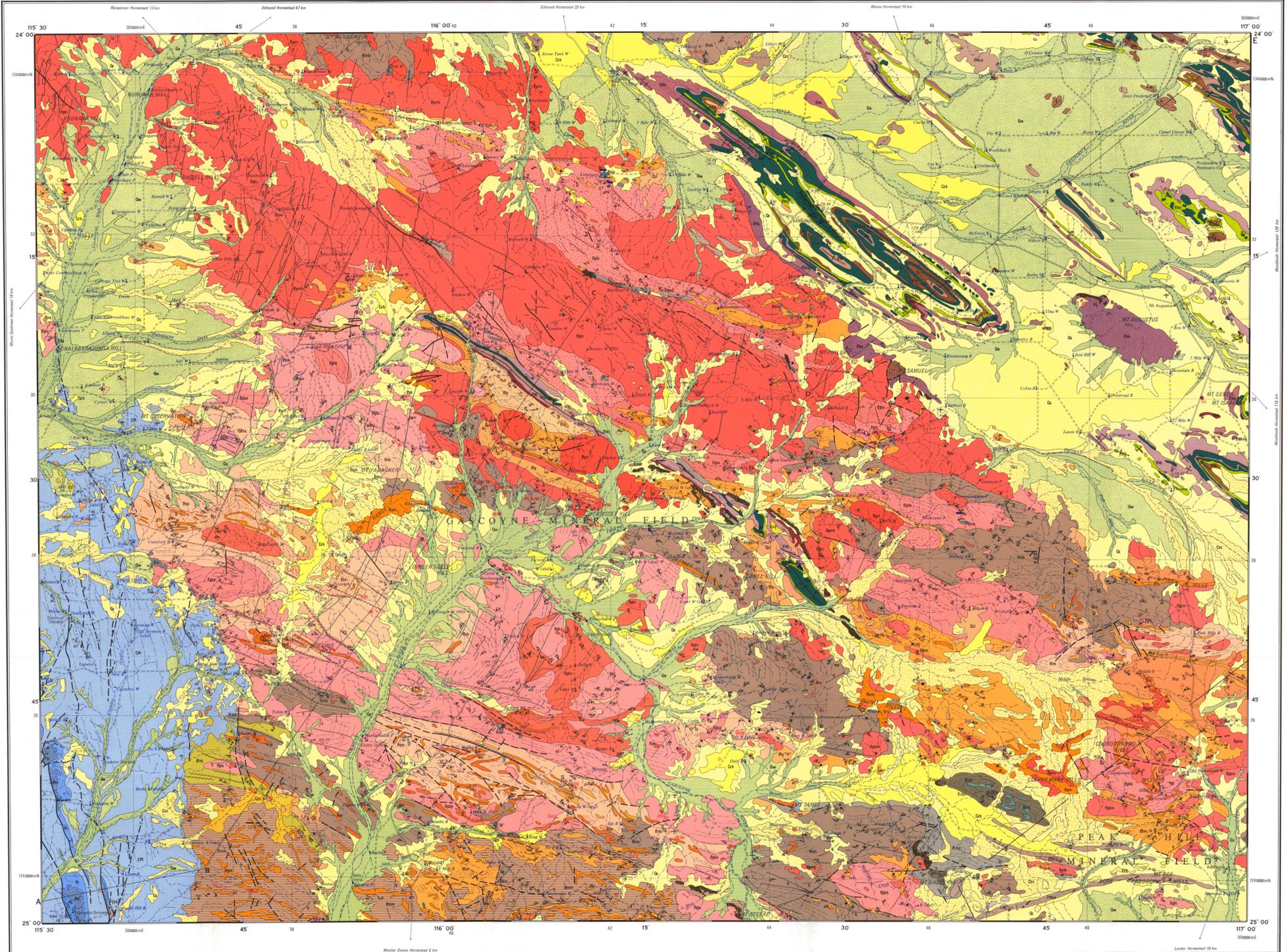


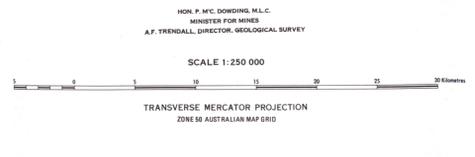
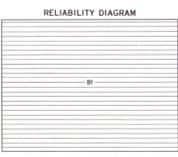
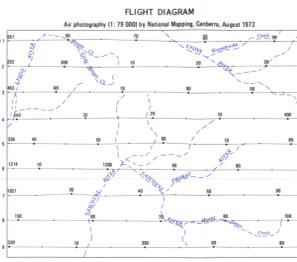
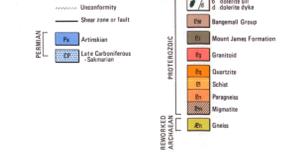
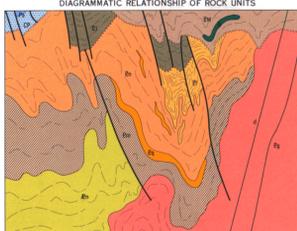
SYMBOLS

- Geological boundary**
 - Fault
 - unconformity
 - inferred
 - discontinuity
 - Shear zone (may be quartz filled)
 - Fold
 - axial trace of anticline showing plunge
 - axial trace of syncline showing plunge
 - plunge of minor right fold (later phase)
 - plunge of minor left fold (later phase)
 - parantic minor fold with plunge (later phase)
 - parantic minor fold with plunge (later phase)
- Bedding**
 - unmeasured
 - measured
 - vertical
 - horizontal
 - inclined
 - air photo interpretation
 - facing
 - pinchout from cross-bedding or cross-lamination
- Greatly bedded**
 - measured
 - vertical
 - horizontal
 - measured
 - vertical
- Metamorphic foliation**
 - measured
 - vertical
- Cleavage**
 - measured
 - vertical
- Lineation**
 - measured
 - vertical
 - measured
 - vertical
- Air photo interpretation**
 - bedding, gneiss banding or metamorphic foliation
 - unbedded
- Fossil locality**
 - general
 - specific
- Mineral field boundary**
 - Formed road
 - Track
 - Homestead
 - Building
 - Locality
 - Horizontal control - main, minor
 - Bench mark, height accurate
 - Landing ground
- Watercourse, intermittent**
 - Pool
 - Well
 - Bore
 - Soak
 - Spring, spring
 - Rockhole
 - Windmill
 - Tank
 - Abandoned
 - Position doubtful
- Mining centre**
 - Mining, not being worked
 - Open cut, not being worked
 - Project
 - Buried abandoned
 - Mineral occurrence
 - Burial
 - Barrel
 - Barrel
 - Barrel
 - Copper
 - Quartz
 - Fluorite
 - Gold
 - Ironstone
 - Lead
 - Nickel
 - Molybdenum
 - Rare earth minerals
 - Scheelite
 - Tantalum - columbite
 - Vanadium
 - Zinc



- REFERENCE**
- QUATERNARY**
 - Qa Alluvium - unconsolidated silt, sand and gravel associated with watercourses
 - Qb Alluvium - unconsolidated silt and sand in sheet wash and pediment plains carrying tertiary hardpan surfaces, often with banks of reddish sand
 - Qc Calicheum - unconsolidated silt, sand, gravel and rubble forming acres or table tops
 - Qd Eolian and residual sand
 - TERTIARY**
 - Ta **NADARRA FORMATION** - lacustrine limestone, includes minor calcareous
 - Tb
 - Tc
 - Td
 - PALAEZOIC**
 - Pa **BILLIDEE FORMATION** - quartz sandstone and siltstone commonly with calcareous cement, rare glacial erratics; shallow marine
 - Pb **MODOODLOO SANDSTONE** - quartz sandstone and siltstone minor conglomerates, rare glacial erratics; shallow to shallow marine
 - Pc **CALLYTHARRA FORMATION** - hard and soft fossiliferous calcarenite, calcilite and siltstone; shallow marine
 - Pd **LYONS FORMATION** - glauconitic sandstone, siltstone and siltite, rare corals; continental to marine
 - Pe **Lyons Member** - quartz sandstone to feldspathic arenite; 7 shallow marine basal member of Lyons Formation
 - MIDDLE PROTEROZOIC**
 - Ma **FORDS CREEK SHALE** - green to dark grey shales, minor arenites and siltstone
 - Mb **CODDAROO FORMATION** - moderate to poorly sorted grey arenites, with minor siltstone and shale towards base
 - Mc **CURRAN FORMATION** - white shales, siltstone in outcrop
 - Md **ULLARARRA FORMATION** - fine-grained, massive or grey arenites with siltstone shales, minor dolomite
 - Me **DEVIL CREEK FORMATION** - dolomite, dolomitic shale
 - Mf **DISCOVERY CHERT** - bedded, black to cream chert, may be very bedded, and laminated
 - Mg **JILLAWARRA FORMATION** - shale and siltstone with minor chert
 - Mh **KANG CREEK FORMATION** - medium-grained arenites with shale, coarse-grained arenite beds and pebbly beds
 - Mi **IRREGULLY FORMATION** - dolomite, with shale and minor arenite, stratiolites present
 - Mj **MT AUGUSTUS SANDSTONE** - coarse-grained quartz arenite, minor conglomerates
 - EARLY PROTEROZOIC**
 - Ea **Mount James Formation** - massive, bedded quartz arenite, with this metamorphosed in some areas
 - Eb **Phyllite** - micromylonitic, polydeformed
 - Ec **Metamorphosed chert and cherty, granitic shale commonly fine-grained, contains garnets and quartz** - metamorphosed micaceous metamorphosed and metachert, commonly granitic
 - Ed **Mylonitic or mylonitic** - gneiss or sill (igneous)
 - Ee **Tremolite (chlorite) rock, ultramafic (sill) (igneous)** - pyroxene gneiss with tremolite and/or hornblende
 - Ef **Biotite gneiss and amphibolite** - coarse-grained and airtite, coarse, medium and fine-grained. Some phases are hydrothermal gneiss
 - Eg **Quartzite** - medium to coarse-grained and granitic medium-grained with some coarse and fine-grained phases
 - Eh **Sericite hornfels** - medium to coarse-grained and airtite, porphyritic and airtite, coarse to fine-grained
 - Ei **Muscovite hornfels** - medium to coarse-grained and airtite, porphyritic and airtite, coarse to fine-grained
 - Ej **Sillite hornfels** - medium to coarse-grained and airtite, porphyritic and airtite, coarse to fine-grained
 - Ek **Sillite hornfels** - medium to coarse-grained and airtite, porphyritic and airtite, coarse to fine-grained
 - El **Sillite hornfels** - medium to coarse-grained and airtite, porphyritic and airtite, coarse to fine-grained
 - Em **Dark grey, gneissic, biotite gneiss** - medium and fine-grained
 - En **PAK, gneissic, biotite (microcline) amphibolite** - medium-grained
 - Eo **Granitic biotite gneiss** - granitic with microcline and biotite, coarse to medium-grained
 - Ep **Oligoclase clinopyroxene (quartz) hornfels** - airtite, airtite, airtite, airtite
 - Eq **Mylonitic and metabasite gneiss** - dark phase of amphibolite or granulite gneiss and a light phase of leucocratic gneiss, partially melted gneiss or gneiss
 - Er **Granitic biotite gneiss** - partially melted and extensively intruded by biotite monzonite and granitic, airtite in part
 - Es **Biotite monzonite (granite) tonalite** - tonalite to andesite, heterogeneous with numerous monzonite and biotite schists
 - Et **Granitic biotite monzonite and gneiss** - porphyritic in part. Some phases are leucocratic biotite gneiss
 - Eu **Quartz monzonite hornfels** - leucite albite and albite gneiss (tonalitic) airtite, include pegmatite and retrograde assemblages
 - Ev **Quartz monzonite hornfels** - leucite albite and albite gneiss (tonalitic) airtite, include pegmatite and retrograde assemblages
 - Ew **Sericite hornfels** - quartz-muscovite hornfels and fine-grained airtite
 - Ex **Sericite hornfels** - quartz-muscovite hornfels and fine-grained airtite
 - Ey **Chlorite amphibole calcite dolomite (quartz) gneiss and schist**
 - Ez **Feldspar quartzite and massive quartzite**
 - Ea1 **Fine-grained, bedded quartzite, recrystallized chert; laminae in part**
 - Ea2 **Quartz microcline oligoclase-biotite muscovite hornfels and schist; medium to coarse-grained; metamorphosed arkose and feldspathic arenite**
 - Ea3 **Quartz biotite muscovite hornfels (granite) and retrograde**
 - Ea4 **Quartz biotite muscovite hornfels (granite) and retrograde**
 - Ea5 **Quartz biotite muscovite hornfels (granite) and retrograde**
 - Ea6 **Quartz biotite muscovite hornfels (granite) and retrograde**
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 - Ea100 **Quartz biotite muscovite hornfels (granite) and retrograde**
 - ARCHAIC**
 - Aa **Banded quartz microcline oligoclase biotite gneiss; reworked Archaean gneiss**

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INDEX TO ADJOINING SHEETS

WINNING POOL SG 50 - 13	EMBOID SG 50 - 14	TURES CREEK SG 50 - 15
KENNEDY RANGE SG 50 - 1	MT PHILLIPS SG 50 - 2	MT EGERTON SG 50 - 3
WOORAMEL SG 50 - 5	GLENBURGH SG 50 - 6	ROBINSON RANGE SG 50 - 7

