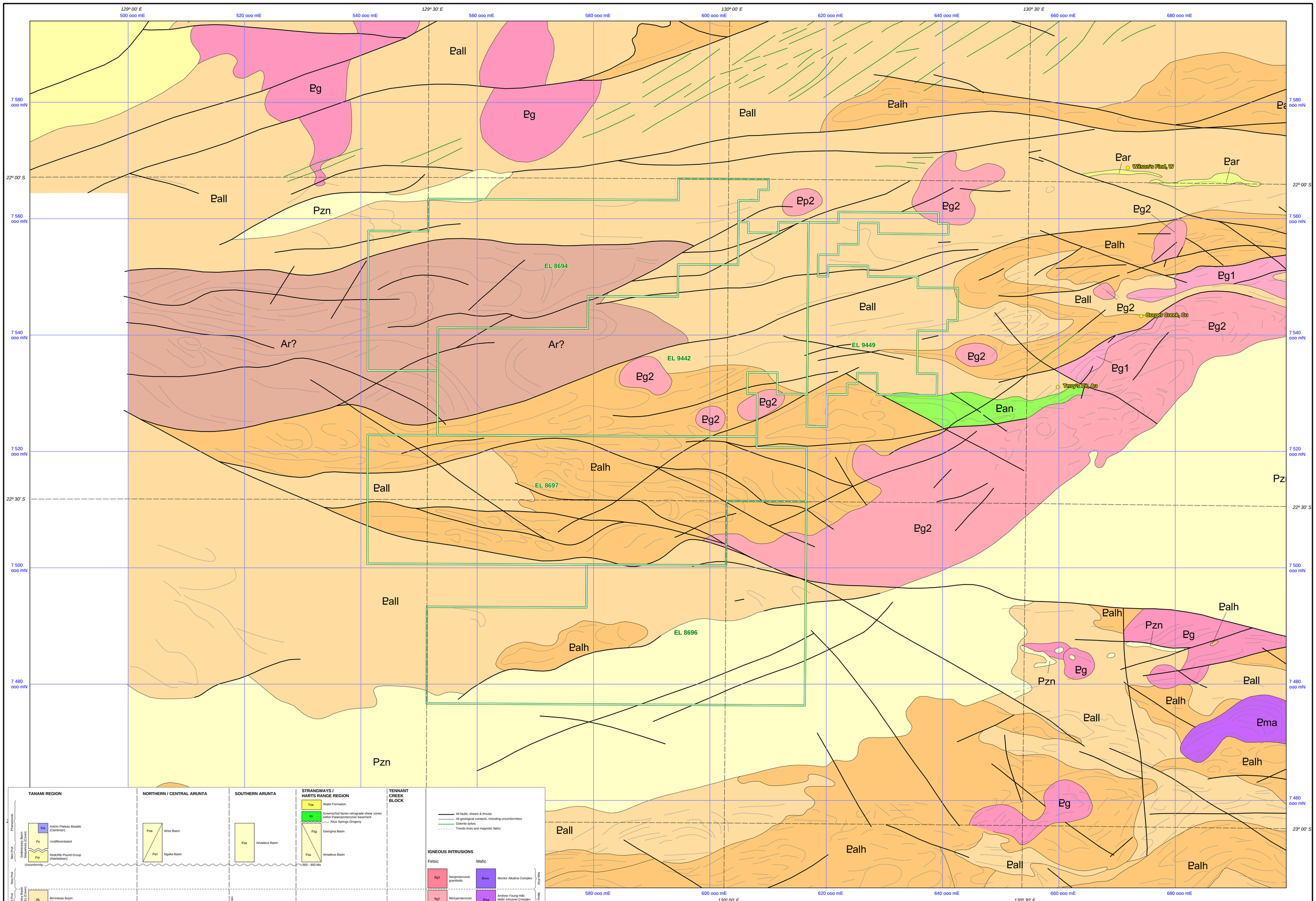


TANAMI REGION

Phanerozoic — Neo-Prot — Sedimentary Basin Sequences (Cover)

- Ꞓla — Antrim Plateau Basalts (Cambrian)
- Pz — Undifferentiated
- Pzr — Redcliffe Pound Group (Adelaidean)

Unconformity

Neo-Prot — Sedimentary Basin Sequences (Cover)

- Ꝑb — Birrindudu Basin (Carpentarian)

Meso-Prot — Palaeo-Proterozoic — Mid-Upper — Tanami Region Sedimentary Basin Sequences

- Ꝑtp — Pargee Sandstone: conglomerate, sandstone, siltstone
- Ꝑtwn — Mt Winnecke Group — 1770Ma; Nanny Goat Volcanics: rhyolite volcanics, basalt, sandstone
- Ꝑtw — Undifferentiated Mt Winnecke Formation: rhyolite & dacite porphyries & volcanics, basalt, sandstone
- Ꝑtc — Mt Charles Formation\Tanami Mine Succession[2]: sandstone, siltstone, basalt
- **Tanami Group** — 1839Ma
- Ꝑtt — Twig Formation: siltstone, sandstone, chert
- Ꝑtk — Killi Killi Formation\Madigan Beds[2]: sandstone, greywacke, siltstone (turbidite sequences)
- Ꝑtd — Dead Bullock Formation\Davidson & Blake Beds[2]: siltstone, numerous dolerite sills
- Ꝑtm — MacFarlane Peak Group[2]/Thompson Beds[2]: *siltstone, greywacke, mafic & felsic volcanics, dolerite sills; *pyrite

Lower — Tanami Region Sedimentary Basin Sequences (Lower)

- Ar — Undiff. Archaean Basement: felsic & mafic gneiss, granite, migmatite & amphibolite
- Arb — Billabong Complex (2514Ma)

Archaean

NORTHERN / CENTRAL ARUNTA

Arunta Region Sedimentary Basin Sequences — Backwater

- Ꝑwn — Nicker Beds ~1770Ma: quartzite, schist, meta-siltstone, felsic volcanics & volcaniclastics
- Ꝑwp — Patmungala Beds ~1800Ma: sandstone, siltstone, BIF, felsic volcaniclastics
- Ꝑwr — Reynolds Range Group: siltstone, sandstone, conglomerate, basalt pelite schist, calc-rocks & quartzite
- Ꝑall — **Lander Rock Beds**: Low mag/low metamorphic grade: greenschist facies: meta pelite & quartzite dolerite sills
- Ꝑalh — High mag/high metamorphic grade: amphibolite-granulite facies: quartzite, schist, gneiss & granofels
- Ar — Undiff. Archaean Basement: felsic and mafic gneiss, granite, migmatite & amphibolite

Pzw — Wiso Basin
Pzn — Ngalia Basin

SOUTHERN ARUNTA

Pza — Amadeus Basin

Arc/Proterozoic of Mt Freeman Ophiolite — Terranes

- Iw — Iwupataka Metamorphics Complex[2] 1620 - 1600Ma
- Ya — Yaya Metamorphics Complex[2] 1680 - 1640Ma

STRANGWAYS / HARTS RANGE REGION

Strangways Metamorphic Complex

- Tsw — Waite Formation
- Cr — Greenschist facies retrograde shear zones within Palaeoproterozoic basement — Alice Springs Orogeny
- Pzg — Georgina Basin
- Pza — Amadeus Basin

900 - 800 Ma

- Ir\Ꝑsh — Irindina Metamorphics[1] (650 - 500Ma Alice Springs Orogeny) / Harts Range Orogenic Belt[2]
- Ꝑhf — Florence Detachment Zone[2]
- Wi\Ꝑua — Wigley Metamorphics[2] >1700Ma / Arltunga Gneiss Complex[2]
- Ꝑeo — Oonagalabi Gneiss Complex[2]
- Ca — Cadney Metamorphics[2] >1780Ma
- Ꝑsc — Cadney Metamorphics[2]
- Ꝑse — Enita Gneiss Complex[2]
- Na — Narwietooma Metamorphics[2] >1870Ma
- Ꝑsg — Garden Metamorphics[2]

TENNANT CREEK BLOCK

- Ꝑch — Hatches Creek Group

All faults, shears & thrusts
All geological contacts, including unconformities
Dolerite dykes
Trends lines and magnetic fabric

IGNEOUS INTRUSIONS

Felsic

- Ꝑg3 — Neoproterozoic granitoids
- Ꝑg2 — Mesoproterozoic granitoids
- Ꝑg — Undifferentiated granitoids, probably Palaeoproterozoic
- Ꝑg1 — Palaeoproterozoic granitoid intrusions 1845 - 1790Ma Tanami Region

Mafic

- Ꝑmm — Mordor Alkaline Complex
- Ꝑma — Andrew Young Hills Mafic Intrusive Complex 1640 - 1600Ma

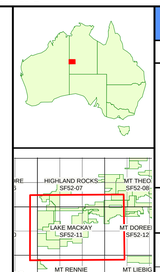
Neo-Prot — Meso-Prot — Palaeo-Proterozoic

[1] NTGS subdivision for Tanami Region
[2] Dr Puquan Ding subdivision
[3] NTGS subdivision for Strangways & Southern Arunta

Explanatory Note:

Bedrock interpretation utilising aeromagnetics, gravity, radiometrics and Landsat imagery tied into published geological fact maps (NTGS and AGSO).

Compilation includes NTGS bedrock interpretation of Granites-Tanami region and in-house TGNL bedrock interpretations by Ding PuQuan, Deng Qi, Jayson Meyers and Tim Smith between 2000 and 2002.



TANAMI GOLD NL

LAKE MACKAY PROJECT

INTERPRETED GEOLOGY with MODAT LOCATIONS

5 0 5 10 20 30 kilometres

MGA Zone 52 (GDA94) — 1 : 250,000

ORIGINATOR:	DATE:	DRAWN:
C.Rohde	Aug 2004	M.H.Bailey

PLAN No: 31_Gi_001

PLATE 2