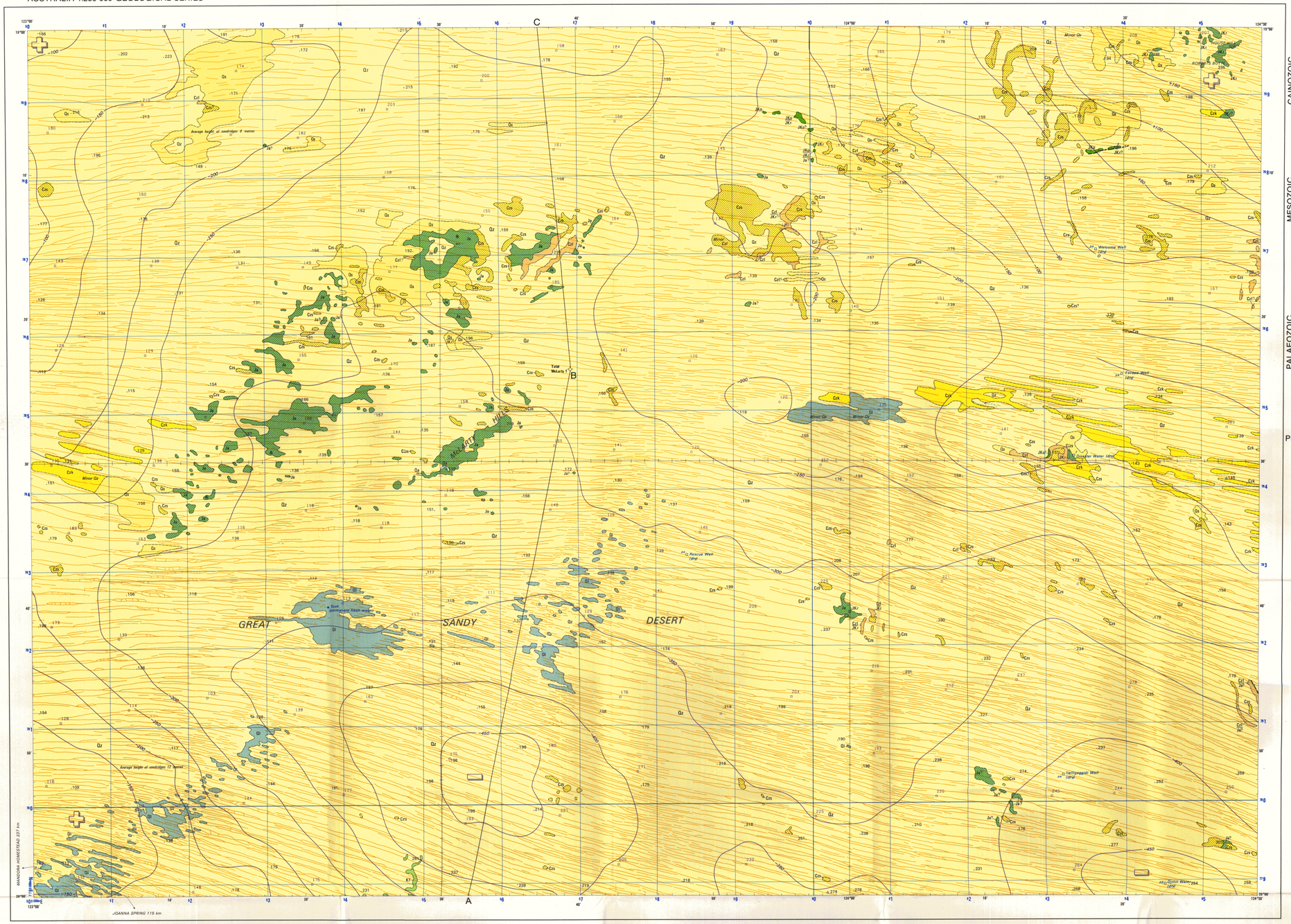
McLARTY HILLS

WESTERN AUSTRALIA

AUSTRALIA 1:250 000 GEOLOGICAL SERIES

SHEET SE 51-15



CAINOZOIC

QUATERNARY

- Qa — *Sand, silt; minor gravel : alluvial*
- Ql — *Silt, fine sand : lacustrine*
- Qs — *Sand, silt; minor gravel : mixed alluvial and aeolian*
- Qz — *Red sand, fine to medium; minor silt : aeolian*
- Crk — *Calcrete; minor chalcedony : pedogenic*
- Crs — *Sand, silt, ferruginous gravel and pisoliths; minor clay : gravel plains overlying Crl*
- Crl — *Laterite, pisolitic or massive : pedogenic*

MESOZOIC

JURASSIC TO EARLY CRETACEOUS

- JK — *Undivided. Section only*

EARLY CRETACEOUS

- Frezier Sandstone — Kf — *Sandstone, fine to coarse, poorly sorted, feldspathic, cross-bedded; very minor mudstone : fluvial to deltaic*
- Broome Sandstone — Kb — *Sandstone, mudstone : shallow marine. Diagrams only*

LATE JURASSIC TO EARLY CRETACEOUS

- Mowla Sandstone — JKa — *Sandstone, coarse with granules, clay pellets, poorly sorted, cross-bedded : fluvial to deltaic*
- Jarlemai Siltstone — JKr — *Sandstone, very fine to fine : interbedded mudstone; ripple-marked, cross-bedded; bioturbated in part : shallow marine*

LATE JURASSIC

- Alexander Formation — Ja — *Sandstone, fine to coarse, interbedded with mudstone; rare conglomerate; ripple-marked, cross-bedded; fossiliferous : shallow marine*

EARLY? TO LATE JURASSIC

- Wallal Sandstone — Jl — *Sandstone; minor siltstone, conglomerate*

PALAEOZOIC

EARLY PERMIAN

- Noonkanbah Formation — Pn — *Mudstone, calcareous, micaceous; fine sandstone, limestone interbeds; fossiliferous*
- Poole Sandstone — Pp — *Sandstone, very fine to fine; interbedded mudstone*
- Grant Group — Pg — *Sandstone, fine to coarse; mudstone; basal conglomerate*

EARLY DEVONIAN

- Tandalgoo Red Beds — Dt — *Fine sandstone, reddish brown, shale; minor limestone*

LATE ORDOVICIAN? TO EARLY DEVONIAN

- Carribuddy Formation — Sc — *Halite, dolomite, siltstone, shale, anhydrite*

MIDDLE ORDOVICIAN

- Nita Formation — On — *Limestone, dolomite, interbedded shale*
- Goldwyer Formation — Ogh — *Shale, black, fossiliferous, calcareous, pyritic; interbedded limestone*
- Willara Formation — Ow — *Limestone, dolomite, fossiliferous, interbedded shale and sandstone*

EARLY ORDOVICIAN

- Nambeet Formation — Ot — *Shale, grey to green, fine sandstone*
- Wilson Cliffs Sandstone — Ot — *Sandstone, fine to very fine, well sorted, calcareous; minor shale*

PRECAMBRIAN

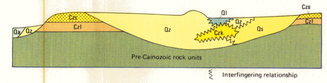
- pC — *Igneous, metamorphic, and sedimentary rocks*

Section and rock relationship diagram only

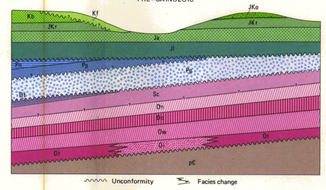
- Geological boundary
- Fault
- *Where location of boundaries and faults is approximate, line is broken; where inferred, queried; where concealed, faults are shown by short dashes.*
- Strike and dip of strata
- Trend-line, Airphoto interpretation
- Macrofossil locality
- Fossil wood locality
- Petroleum exploration well, dry, abandoned
- Well
- Sand dunes
- Vehicle track
- Trigonometrical station
- 176 — Elevation in metres
- pa — Position approximate
- 182 D — Selected gravity station with elevation in metres
- —300— Bouguer gravity anomaly, (micrometres sec^{-2}), computer-plotter produced
- Gravity anomaly — relative high
- Gravity anomaly — relative low

DIAGRAMMATIC RELATIONSHIP OF ROCK UNITS

CAINOZOIC

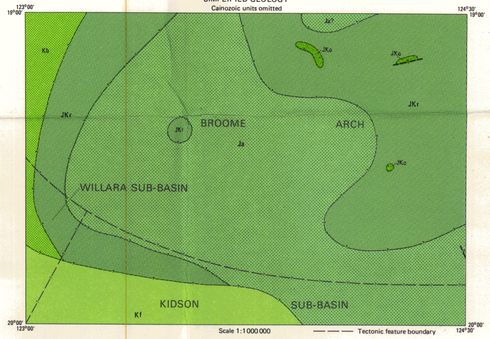


PRE-CAINOZOIC



SIMPLIFIED GEOLOGY

Cainozoic units omitted



Scale 1:1 000 000 — Tectonic feature boundary

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Showing magnetic declination 1975

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UNIVERSAL GRID REFERENCE

GRID ZONE DESIGNATION: 51K

100,000 METRE SQUARE IDENTIFICATION

VU	WU	XU
VT	WT	XT
VQ	WQ	XQ

IGNORE the SMALLER figures of the grid number: example: 3 4 — finding the full co-ordinates. Use ONLY the LARGER figures of the grid number: example: 3 4

TO GIVE A STANDARD REFERENCE ON THIS SHEET TO NEAREST 1000 METRES

SAMPLE POINT: ◻ *Disaster Water*

1 Read letters identifying 100 000 metre square in which the point lies: XU
2 Locate first VERTICAL grid line to LEFT of point and read LARGE figure labelling the line either in the top or bottom margin, or on the line itself: 3
3 Estimate tenths from grid line to point: 3
4 Locate first HORIZONTAL grid line BELOW point and read LARGE figure labelling the line in either the left or right margin, or on the line itself: 4
5 Estimate tenths from grid line to point: 4

SAMPLE REFERENCE: XU3344

If reporting beyond 10° in any direction, prefix Grid Zone Designation, as: 51KXU3344

SCALE 1:250 000

5 0 5 10 15 20 25 Kilometres

BLUE NUMBERED LINES ARE 10 000 METRE INTERVALS OF THE AUSTRALIAN MAP GRID, ZONE 51
TRANSVERSE MERCATOR PROJECTION

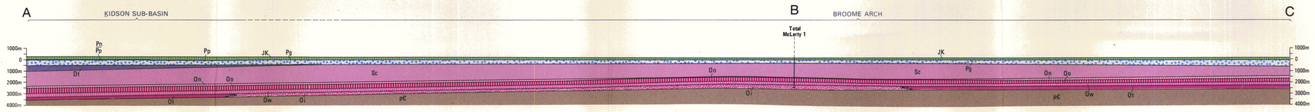
RELIABILITY DIAGRAM

Geology C — General reconnaissance: few traverses, mainly airphoto interpretation
Helicopter traverse
Gravity A — Detailed survey
B — Reconnaissance

SCHEMATIC SECTION

Cainozoic sediments omitted

Scale $\frac{V}{H}$ = 1



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McLARTY HILLS

SHEET SE 51-15

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