

REFERENCE

AQUIFER TYPES

- Surface deposits—local aquifers (not saturated everywhere), minor groundwater resources
- Sedimentary rocks in paleochannels—major aquifers, major groundwater resources
- Sedimentary rocks in paleochannels—aquifers, no groundwater resources (pore only)
- Fractured and deeply weathered rocks—local aquifers, minor groundwater resources, locally large supplies from fracture zones

HYDROGEOLOGY

- Quaternary: Pebbly lake sediments—mostly clay; Minor shallow aquifers, possible small supplies in sandy beds; hypersaline
- Tertiary: Alluvium and colluvium—fine sand, gravel; coarse-grained paleochannels; Local shallow aquifer; saline to hypersaline
- Proterozoic: PERDILLI SHALE and equivalents—shale, siltstone, minor sand; restricted to paleochannels (pore only); Aquifer
- Archaean: WOLLUMBAT SANDSTONE and equivalents—sand, siltstone (Eocene); restricted to paleochannels, controlled by PERDILLI SHALE; Major aquifer; saline to hypersaline
- Proterozoic: Mafic and ultramafic dykes; mainly interpreted, includes minor outcrop; Aquifer
- Archaean: Veins and dykes—p-pyroxene, q-quartz; Significant local aquifer; brackish to saline
- Archaean: Granitoid rock, includes porphyry; weathered, outcrop (indicated by overprint); Local aquifer; brackish to saline
- Archaean: Chert and banded iron-formation; Significant local aquifer; brackish to saline
- Archaean: Sedimentary, and felsic volcanic and volcanoclastic rocks; includes KURRAWANG FORMATION; Minor local aquifer; saline to hypersaline
- Archaean: Mafic and ultramafic rocks; Local aquifer; saline to hypersaline

SYMBOLS

GEOLOGY

- hydrogeological boundary; concealed
- fault or shear zone
- strongly sheared rock
- intermittent drainage
- surface water divide; major, minor
- claypan or intermittent lake, fresh to brackish
- playa lake, saline to hypersaline
- rockhole, gamma hole, waterhole
- spring
- dam
- lock
- water pipeline, Goldfields Water Supply

SURFACE WATER FEATURES

- intermittent drainage
- surface water divide; major, minor
- claypan or intermittent lake, fresh to brackish
- playa lake, saline to hypersaline
- rockhole, gamma hole, waterhole
- spring
- dam
- lock
- water pipeline, Goldfields Water Supply

GROUNDWATER FEATURES

- production bore, >50 m³/d
- bore
- bore, no data
- well, no data
- bore, abandoned

ARTIFICIAL FEATURES

- production bore, >50 m³/d
- bore
- bore, no data
- well, no data
- bore, abandoned

MINING INFORMATION

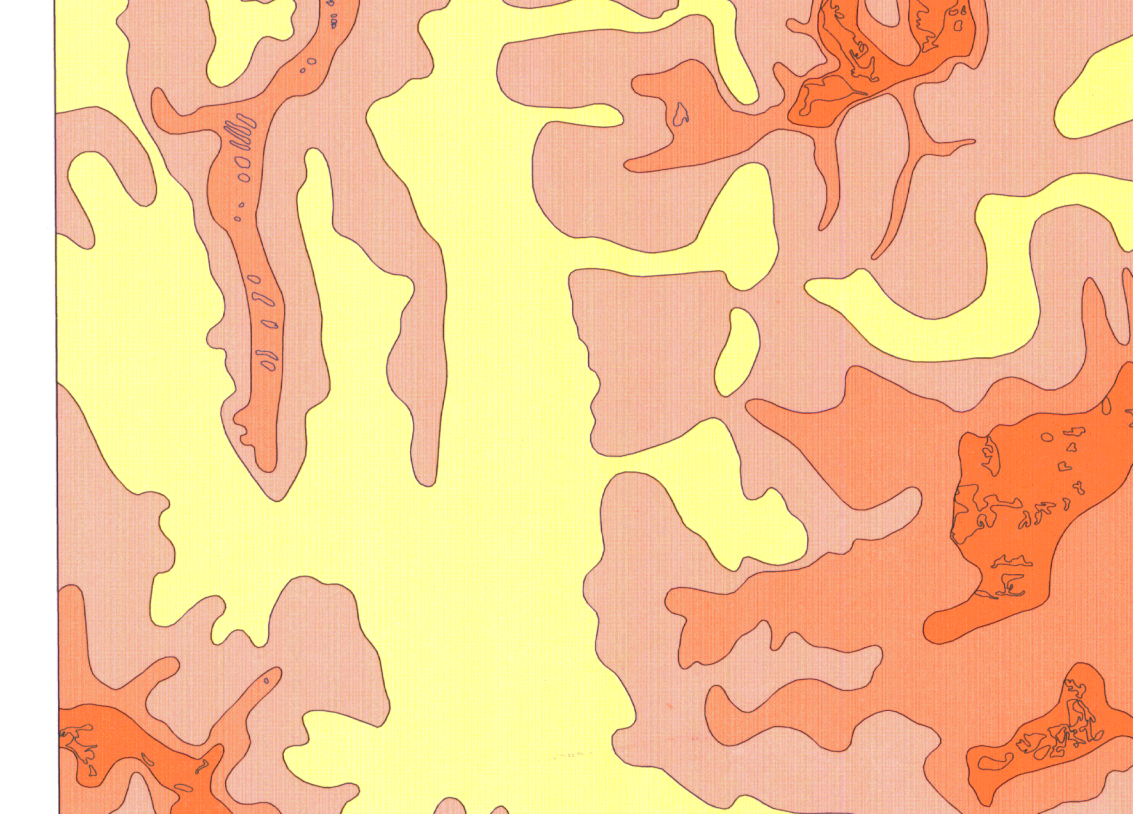
- major mine, major open-cut
- significant mine, open-cut, proposed
- mining locality
- mine name

TOPOCADASTRAL INFORMATION

- highway with national route marker
- bordered road
- road
- railway, with siding
- airfield, landing ground
- township, population greater than 10000
- township, population less than 10000
- locality
- national control point, minor
- control line, 50 metre interval
- national park boundary

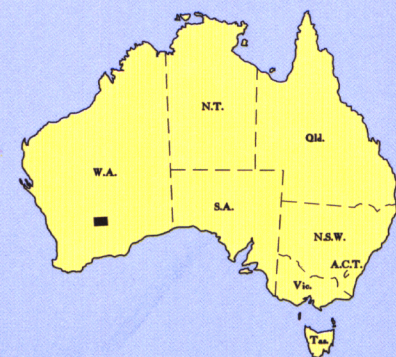
GROUNDWATER SALINITY

(inferred from sparse data)



Total dissolved solids (mg/L)

1000 2000 10000

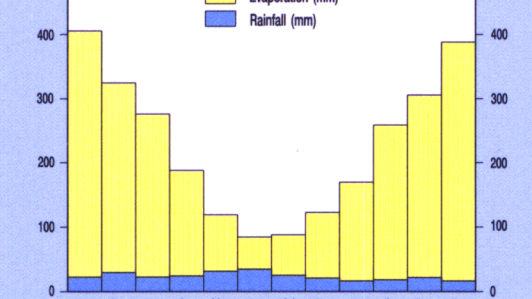


INDEX TO ADJOINING SHEETS

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JACKSON SH 50-12	KALGOORLIE SH 51-9	KERNALLYN SH 51-10
SOUTHERN CROSS SH 50-18	BOORABIN SH 51-13	WIDEMOUTH SH 51-14

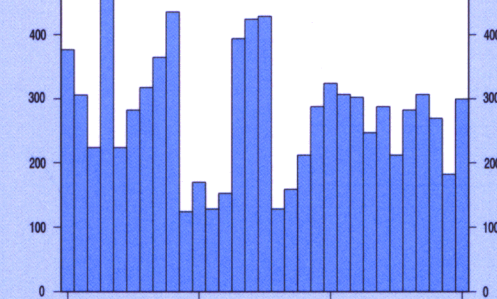
MEAN MONTHLY RAINFALL

AND EVAPORATION AT KALGOORLIE

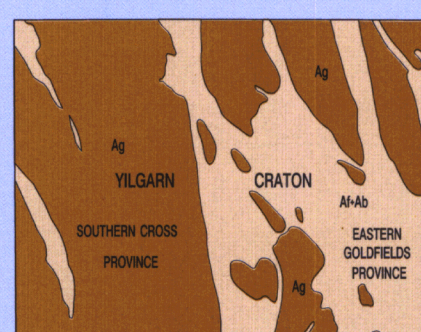


ANNUAL RAINFALL (mm) AT KALGOORLIE (1960-1990)

Mean annual rainfall 258 mm



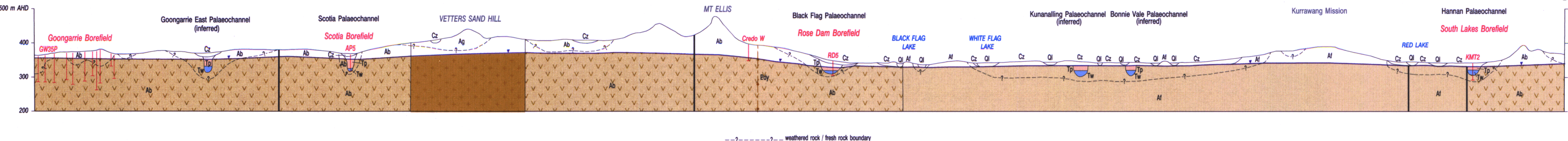
REGIONAL GEOLOGICAL SKETCH



Hydrology by A.M. Kim 1982-1983
Geology after S. Wythe 1982-1983
Cartography by the Cartographic Services Branch, Surveys and Mapping Division, Department of Minerals and Energy, Western Australia
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DIAGRAMMATIC SECTION

Vertical exaggeration x 25



SCALE 1:250 000

5000 0 5 10 15 20 25 30
Metres
TRANSVERSE MERCATOR PROJECTION
Grid lines indicate 20 000 metres interval of the Australian Map Grid Zone 51

HYDROGEOLOGICAL SERIES
KALGOORLIE

SHEET SH 51-9

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