

## AQUIFER TYPES

- Surface deposits—local aquifers (not saturated everywhere), minor groundwater resources
- Sedimentary rocks in paleochannels—major aquifers, major groundwater resources
- Sedimentary rocks—local aquifers, minor groundwater resources
- Fractured and deeply weathered rocks—local aquifers, minor groundwater resources, locally large supplies from fracture zones

## REFERENCE

## HYDROGEOLOGY

- Qa Plays lake sediments—mostly clay
  - Qc Alluvium and colluvium—clay, sand, gravel, coarsest paleochannels
  - T1 Unconsolidated tertiary units—gravel, sand, silt, clay, limestone, lignite, includes PERMIAN FORMATION, MIDDLE PERMIAN FORMATION, HARTON SANDSTONE, HARTON LAMBERT, PERMIAN SHALE, covered by younger Cretaceous sediments
  - T2 PRINCESS ROYAL SPONGOLITE and equivalents—conglomerate, minor alluvium, shale
  - T3 WOLLBAR SANDSTONE—sandstone, alluvium restricted to paleochannels; covered by PERMIAN SHALE and younger Cretaceous sediments
  - Bv WOOLBAR BEDS—quartzite, and minor phyllite
  - Bc FRASER COMPLEX—granulite and amphibolite
  - Bd DALLAP GNEISS—granulite gneiss, mostly weathered
  - Ma Mafic and ultramafic dykes, outcrop, intruded where dated
  - Ga Granitoid rock, includes: outcrop (indicated by overprint), weathered
  - Ba Quartzite/kyanite gneiss, mostly outcrop
  - Al Chert and banded iron formation
  - H1 Sedimentary, and felsic volcanic and volcanoclastic rocks, includes MERCURIAL CONGLOMERATE
  - H2 Mafic and ultramafic rocks
- Minor shallow aquifer, possible small supplies in sandy beds, hypersaline
- Local shallow aquifer, saline to hypersaline
- Major aquifer to aquiclade, saline to hypersaline
- Minor aquifer where saturated, saline to hypersaline
- Major aquifer, saline to hypersaline
- Local aquifer, brackish to saline
- Local aquifer, brackish to saline
- Local aquifer, brackish to saline
- Aquiclade
- Local aquifer, brackish to saline
- Local aquifer, brackish to saline
- Significant local aquifer, brackish to saline
- Minor local aquifer, saline to hypersaline
- Local aquifer, saline to hypersaline

## GEOLOGY

- hydrogeological boundary, concealed
- bulk or shear zone

## SURFACE WATER FEATURES

- intermittent drainage
- major surface water divide
- ridge or intermittent lake, fresh to brackish
- playa lake, saline to hypersaline
- pool
- lake
- dam
- tank
- water pipeline, Goodlands Water Supply

## GROUNDWATER FEATURES

- isopotential (1985-1986), m AHD
- direction of groundwater flow
- water table (section only)

## ARTIFICIAL FEATURES

- production bore, >10 m deep
- bore
- well
- bore, no date
- well, no date
- bore, abandoned
- well, abandoned

## SYMBOLS

- St Ines
- mine pit, abandoned
- mine pit, current
- mine name
- groundwater pipeline

## MINING INFORMATION

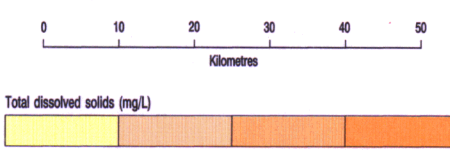
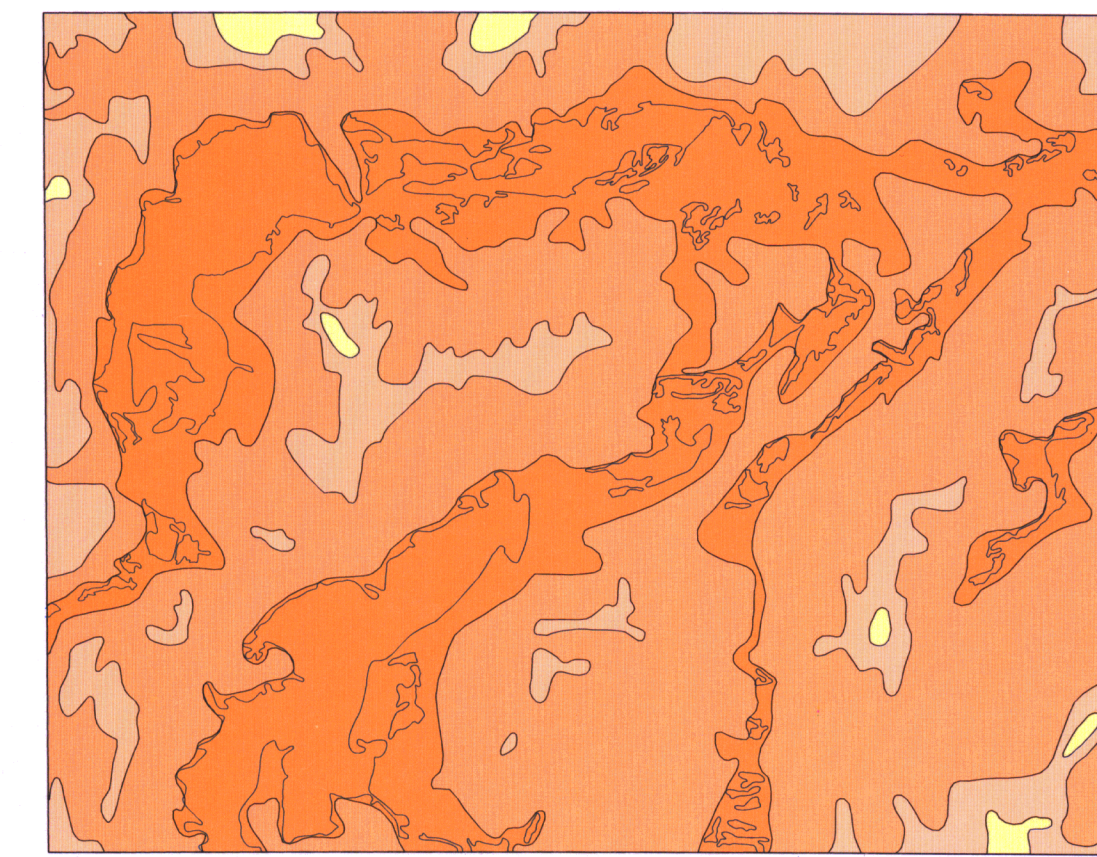
- major mine, major opened
- significant mine, current
- mine locality
- mine name

## TOPOCADASTRAL INFORMATION

- highway with national route marker
- bordered road
- track
- utility, with setting
- artificial, boundary present
- KAMBALDA EAST
- Higginsville
- township, population 1000 - 15 000
- township, population less than 1 000
- homestead
- yard
- horizontal control, major, minor
- control line, 10 metres interval

## GROUNDWATER SALINITY

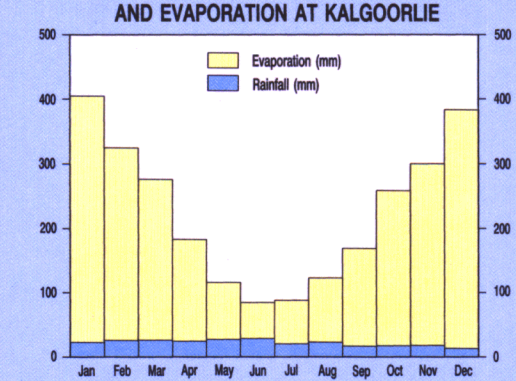
(inferred from sparse data)



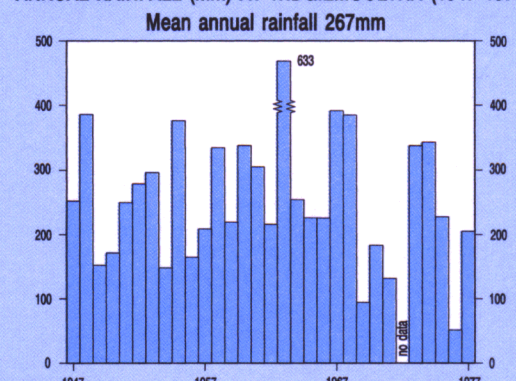
## INDEX TO ADJOINING SHEETS

KALGOORIE SH 51-9	KURRALA SH 51-10	CARELLEE SH 51-11
BOONABAN SH 51-12	WIDGIEMOOLTHA SH 51-14	ZANTHAS SH 51-15
LAKE EYRE SH 51-1	NORONHA SH 51-2	MALDONADA SH 51-3

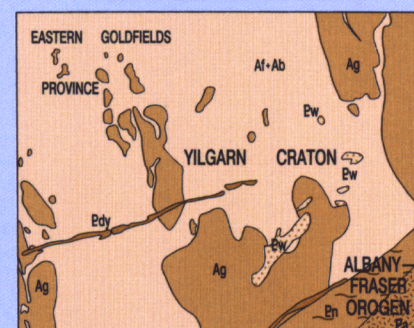
## MEAN MONTHLY RAINFALL AT WIDGIEMOOLTHA AND EVAPORATION AT KALGOORIE



## ANNUAL RAINFALL (mm) AT WIDGIEMOOLTHA (1947-1977)



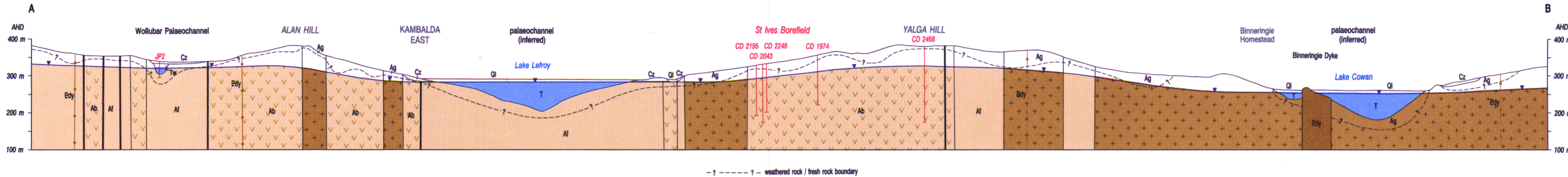
## REGIONAL GEOLOGICAL SKETCH



Hydrogeology by: A.M. Kern 1992-1994  
Geology after A.M. Kern 1979-81, T.J. Giller 1980-84, C.P. Swager and T.J. Giller 1980,  
J.S. Myers 1984, C.P. Swager 1984  
Edited by: C. Strong, R. Dubard  
Cartography by: C. Barlett, M. Fraser, G. Lear of the Cartographic Services Branch,  
Survey and Mapping Division, Department of Minerals and Energy, Western Australia  
Compiled and produced using computer-assisted graphic applications, and available in digital form  
Topographic base supplied by the Department of Land Administration and modified  
from geologic field notes  
Published by and available from the Geological Survey of Western Australia,  
Department of Minerals and Energy, 100 Plain Street, East Perth, 6004  
Printed by the State Print, Department of State Services, Western Australia

## DIAGRAMMATIC SECTION

Vertical exaggeration x 25

HYDROGEOLOGICAL SERIES  
WIDGIEMOOLTHA

SHEET SH 51-14

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